

Some new and little known South African Acridoidea (Orthoptera).

by

V. M. DIRSH

Anti-Locust Research Centre, London.
With preface by Dr B. P. Uvarov. F.R.S.

PREFACE.

This paper includes a part of the results of my tour of the Union of South Africa in 1955, when I was able to carry out some collecting of Orthoptera in the field, as well as to visit several museums and bring back specimens deserving further study. Other new or interesting genera and species have been described elsewhere by Dr. Dirsh, and some are still being studied.

This material presents evidence of the exceptional richness of the South African Acridid fauna. A complete list of the species known from Southern Africa has recently been published (Dirsh 1956, South African Animal Life. Uppsala), but the present paper adds a surprising number of new species, and even genera, to those already known from that country. It is to be noted that most of the insects described below are either brachypterous, or apterous, in many cases small and larva-like. This probably, accounts for their remaining undescribed, as generally most collectors would mistake them for larvae and refrain from taking them. It is to be hoped that this paper will induce South African collectors to pay more attention to Acrididae including "doubtfully adult" specimens, since flightless species are likely to be narrowly localised and many more are undoubtedly still awaiting discovery. This appears to be particularly so in the case of Cape Peninsula, where numerous specimens of a new genus and a further new species, together with several very insufficiently known ones, were taken on a single Sunday trip, mostly in dense evergreen thickets of the typical Cape vegetation, with Ericaceae and Proteaceae very prominent in its composition.

I take this opportunity to record my sincere gratitude to Mr. C. du Plessis and Mr. A. Lea who organised my tour. Mr. Lea, Mr. C. J. B. Smit and Mr. D. H. Botha, moreover, accompanied me during the tour and were inveigled by me into collecting grasshoppers wherever we went. I owe them my deep thanks, as well as an apology for labelling all the specimens as having been taken by me, while in fact they are the result of our pooled efforts. My special thanks are due to Mr. P. H. Hattingh who was in charge of our travelling and camping arrangements during a large part of the tour, which was made by him unusually comfortable and pleasant in every respect.

B. P. Uvarov

Anti-Locust Research Centre, London.

Batrachidacris tuberculata (Rehn 1956). (Pl. 1).

This species was described by me as new in the manuscript of this paper, but in the meantime Rehn (Trans. Amer. Ent. Soc., 82: 112, 1956) described undoubtedly the same insect as *Crypsiceracris tuberculata*; this generic assignment is incorrect. The following description and figures include some features not considered by Rehn.

♂. Comparatively small, very robust and rugulose.

Comparatively small, very robust and rugulose.

Antenna very short, about half again as long as the longest diameter of the eye, with eight distinctly separated, compressed segments; apical segment with a trace of transverse suture. Head slightly prognathous, globular, with flat face, strongly widened at the base of mandibles. Fastigium of vertex roundly merging into frons; fastigial furrow narrow and deep. Frontal ridge low, triangular, obliterated below the base of antenna. Antennal grooves very deep, narrowing at the upper ends. Facial carinulae weak. Eyes small, with a wide interspace between them. Ocelli rudimentary. Pronotum wider than long, widening towards posterior end, with straight anterior and broadly rounded posterior margin, all margins densely covered with tooth-like tubercles; the disc weakly saddle-shaped; lateral lobe forms almost straight angle with the disc and is separated from it by a row of tooth-like tubercles, which form a structure analogous to a lateral carina; median carina absent; only one transverse sulcus is distinct, but it does not cross the whole disc. Prosternal projection low, broad, collar-shaped, with roughly serrated margin. Mesosternal interspace very wide; oval. Metasternal interspace as wide as the mesosternal and separated from it by a furrow. Metanotum and first four abdominal tergites with median (the tergites also with lateral) rows of large tubercles. Anterior and middle femora robust, covered irregularly with small tubercles, posterior femur very broad, its upper carina with large, irregularly spaced teeth; lower carina weakly undulated; external disc wide, with shallow, irregular, cell-like sculpture; lower external area wide, with sparsely scattered small, tubercles. Hind tibia with five (left leg) and six (right leg), external spines, and seven internal spines including the apical. Tarsus comparatively small and weak. Arolium half as long as a claw. Supra-anal plate broadly triangular, simple, with a transverse furrow in the middle. Cercus short, obtusely conical. Subgenital plate short and broad, subconical, with obtuse apex.

Epiphallus of usual form for the genus, with small lateral plates and strong, tooth-shaped lophi.

General colouration sandy-yellow. Antennal grooves purple. Hind tibia yellow; its spines yellow, except their upper surfaces and apices, which are dark brown.

♀. Larger with relatively broader and much more flattened body than in the male. Pronotum is less tuberculate and less toothed on the edges. Supra-anal plate triangular. Paraprocts very large, produced far beyond the apex of supra-anal plate and almost covering the ovipositor. Valves of ovipositor

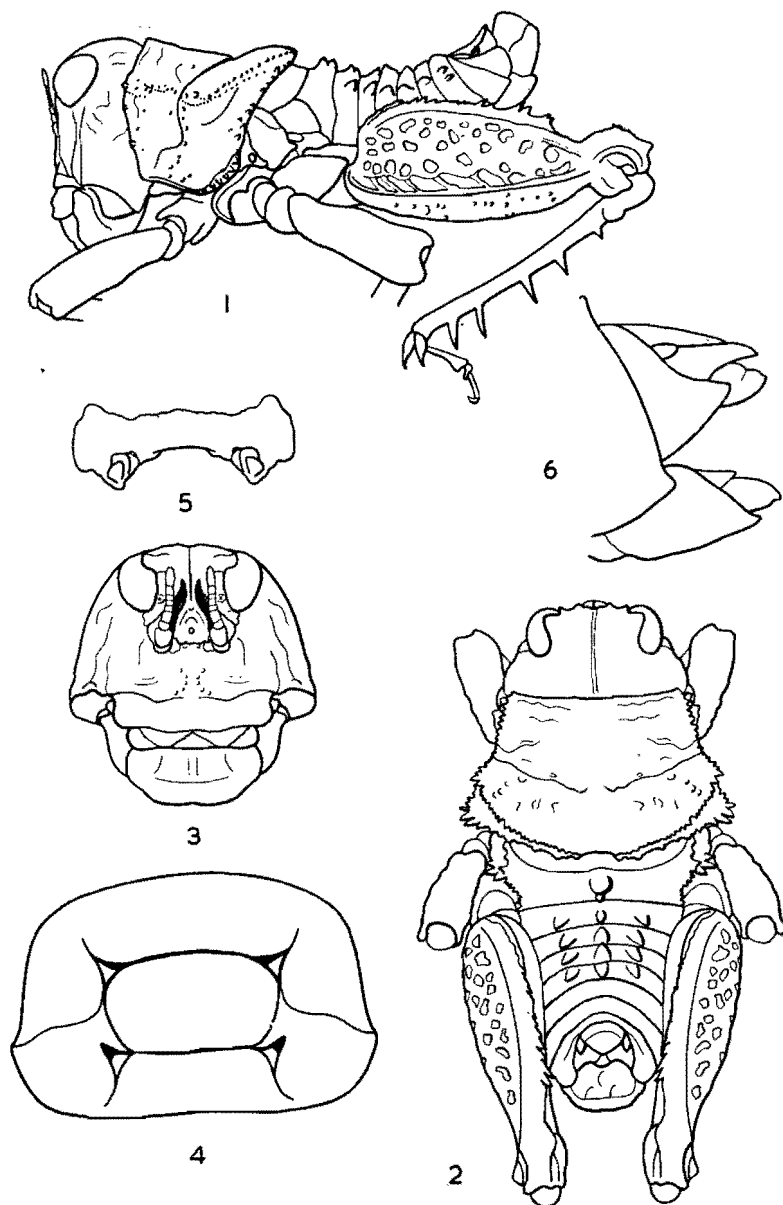


PLATE 1. *Batrachidacris tuberculata* (Rehn) Fig. 1, male lateral view, 2, from above. 3, face, the antennal grooves shown in black, 4, meso- and metasternum. 5, epiphallus. 6, female, end of abdomen, lateral view.

broad and robust, but extremely short, with obtuse apices. Apical margin of subgenital plate obtusangulate.

General colouration sandy-brownish.

Length of body ♂ 20.3—21.7, ♀ 24.4; pronotum ♂ 6.3—6.5, ♀ 6.7; hind femur ♂ 7—7.2, ♀ 13 mm.

This species is the second known in the genus, and it differs strongly from *B. rubridens* Uvarov 1929 by the less prognathous head; frontal ridge obliterated in the lower half; relatively shorter antenna; toothed upper carina of the hind femur; smaller size and the absence of red colour on the mandibles.

South-West Africa: Haalenberg, 10 m. West, Sept. 1950, 2 ♂, 1 ♀ (G. van Son).

Geloiomimus spinosus Dirsh 1956 (Pl. 2).

This species was described from a single female. The male is available now.

♂. Body strongly elongated, very thin, much smaller and much more slender than in the female. Crest in the prozona of pronotum relatively low, tubercle-like, with the upper margin not serrated in profile; projection on the posterior end of metazona relatively low and less acute. Elytron and wing fully developed, almost reaching end of abdomen. Anterior and posterior margins of elytron almost straight, apex rounded, venation of normal type, reticulation moderately dense, except in the medial area, where the veinlets are thickened. Wing narrow with thin membrane.

Supra-anal plate narrow triangular, with a median longitudinal sulcus in the basal half. Cercus short, conical, with subacute apex. Subgenital plate conical, subacute.

Epiphallus is shield-like, deeply excised in the middle of the posterior end; ancorae large; lateral plates distinct; opposite ancorae there is a pair of lateral longitudinal convexities, covered with strong teeth.

Length of body 26—27.2, pronotum 4.7—5.2, elytron 17.3—18.2, hind femur 12—12.6 mm.

The shape of epiphallus is quite peculiar, since although of the usual Pamphagoid form, it became almost bridge-like, owing to a very deep posterior excision.

South Africa: Bushmanland, Jackals Water, Oct. 1911, 2 ♂, 1 ♀; Henkies, Oct. 1911, 5 ♂ (Lightfoot) Bushmanland, Oct. 1905, 1 ♀. South African Museum.

Gen. *Devylideria* Sjöstedt 1923.

The genus *Devylideria* and its type *D. coryphistoides* were described from a single female, and now the male is available. Both sexes of the second species, *D. capensis* Dirsh 1956, were described recently. A third, new, species is described below.

Key to species.

- 1 (4) Fastigium of vertex longer than largest diameter of eye (Pl. 3, 4).
Antenna much longer than head (Pl. 3, 4).
- 2 (3) Ratio of length to width of hind femur about 4.8 (Pl. 3, f. 10). Male
subgenital plate subacute, in profile with obliquely truncate apical
margin (Pl. 3, f. 8). Valves of ovipositor strongly curved at the apices
(Pl. 3, f. 4). *coryphistoides* Sjöst.
- 3 (2) Ratio of length to width of hind femur about 4.2 (Pl. 4, f. 10). Male
subgenital plate in profile with rounded apex (Pl. 4, f. 9). Valves of
ovipositor almost straight (Pl. 4, f. 4). *bothai* sp.n.
- 4 (1) Fastigium of vertex shorter than largest diameter of eye (Pl. 5, f. 1, 5).
Antenna little longer than head (Pl. 5, f. 3, 7). *capensis* Dirsh

The differences between species, as may be seen from the key and plates 3—5, are quite obvious, but except for some slight deviations, the structure of the phallic complex is the same in all three species. Male cercus and supra-anal plate are also of the same shape. Ovipositor and hind femur are of the same shape in *D. coryphistoides* and *D. capensis*, but different in the new species.

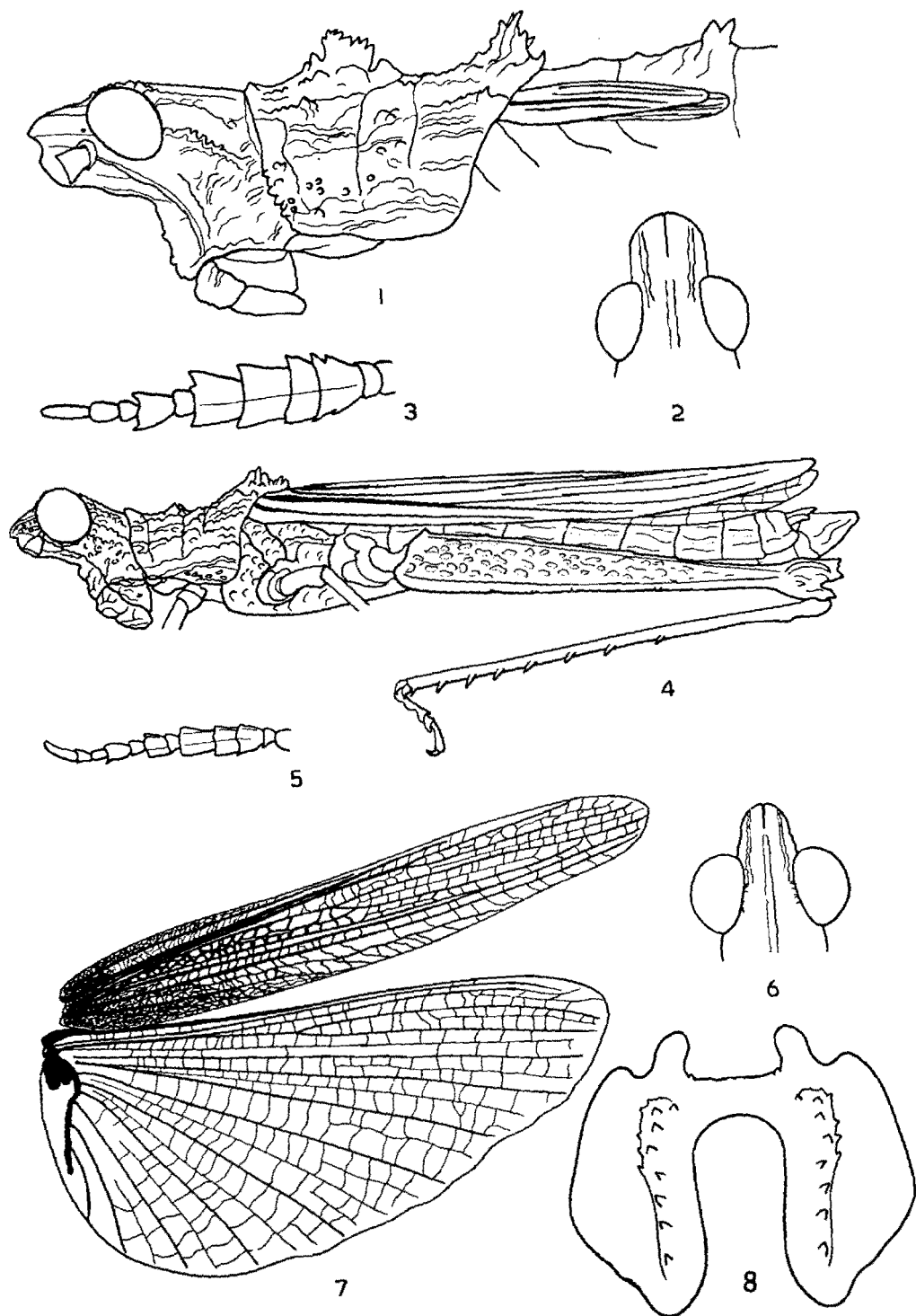
Devylderia coryphistoides Sjöstedt 1923 (Pl. 3).

The hitherto unknown male of the species is described below.

♂. Body very slender, thin and rugulose.

Antenna shorter than head and pronotum together, but much longer than the head, expanded and compressed, with sixteen strongly separated segments forming strongly serrated edges. Fastigium of vertex longer than the largest diameter of the eye, parabolic, with lateral margins convex at the base; upper surface with a pair of irregular parallel carinulae and numerous rugosities. Occipital carinula strong. Frontal ridge in apical third thin, laminate, strongly projecting, below sulcate with low carinulae, which are constricted and fused at the ocellus; under the ocellus they diverge downwards. Facial carinae moderately strong. Pronotum short, subcylindrical with posterior margin almost straight; median carina distinct, lateral carinae irregular, callous, slightly convergent in the middle; transverse sulci weak, scarcely noticeable above. Lower margin of lateral pronotal lobe sinuate. Prosternal tubercle square in cross section, with rounded apex. Mesosternal interspace elongated, narrow, more than twice as long as its width, constricted in the middle; mesosternal lobe rounded. Metasternal interspace twice as long as broad,

PLATE 2. *Geloiomimus spinosus* Dirsh. Figs. 1—3, female, 1, head and pronotum, lateral view. 2, fastigium of vertex, above. 3, antenna. Figs. 4—8, male, 4, whole insect. 5, antenna. 6, fastigium of vertex. 7, elytron and wing. 8, epiphallus.



open. Anterior and middle legs short, with femora slightly thickened; posterior femur slender, ratio of its length to width 4.3.

Supra-anal plate narrow, triangular, with a pair of longitudinal lateral callosities and with three pairs of median tubercles. Cercus short, conical. Subgenital plate long, narrow, with subacute apex and obliquely truncate profile of the apical margin.

Epiphallus bridge-shaped, with large broad ancorae, small lateral plates and strong hook-shaped lophi.

General colouration brownish-grey, with indistinct brownish longitudinal stripes. Lower surface of hind tibia blackish.

Length of body 14—17.3, pronotum 2—2.6, hind femur 16.7—17.8 mm.

South Africa. Cape Prov., Cape Peninsula, 16.10.1955, 1 ♂. Between Caledon and Riversdale, 17.10.1955, 1 ♂, 2 ♀ (B. P. Uvarov).

Devylideria bothai sp.n. (Pl. 4).

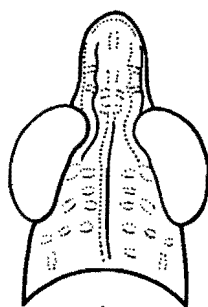
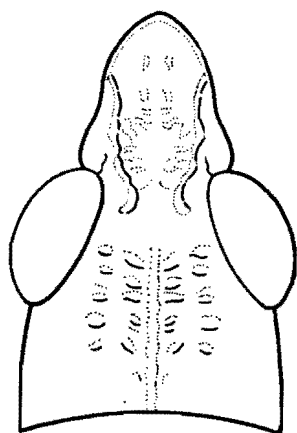
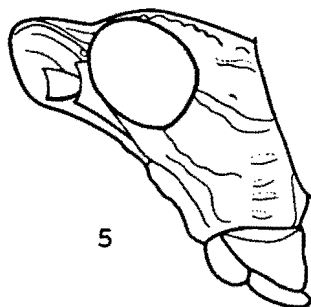
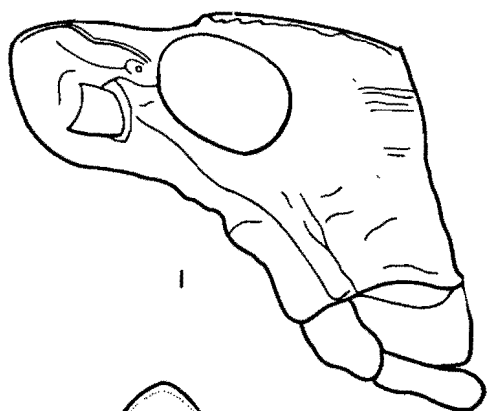
♂ type. South Africa: Cape Peninsula. British Museum (Natural History).

Body slender, rugulose.

Antenna shorter than head and pronotum together, but longer than the head, expanded and compressed laterally, with sixteen strongly separated segments, forming serrated edges of the antenna. Fastigium of vertex longer than the largest diameter of the eye, regularly parabolic; above with longitudinal concavity between a pair of irregular, sinuated, strong carinulae and with numerous wrinkles; weak occipital carinula present. Frontal ridge in apical third thin, laminate, strongly projecting; below with shallow sulcus and low parallel carinulae, constricted at the ocellus and with divergent low carinulae below the ocellus. Facial carinulae strong. Pronotum short, sub-cylindrical, with almost straight posterior margin. Median carina weak; lateral carina indistinct. Transverse sulci indistinct. Lower margin of the lateral pronotal lobe weakly sinuate. Prosternal tubercle almost square in cross-section with rounded and slightly broadened apex. Mesosternal interspace narrow, elongated, broadened anteriorly and constricted in the middle; mesosternal lobe rounded. Metasternal interspace elongated, open. Anterior and middle legs short, with the femora thickened. Posterior femur moderately slender, its ratio of length to width 4.2. Tibia as long as femur. Tarsus short. Arolium large, longer than a claw.

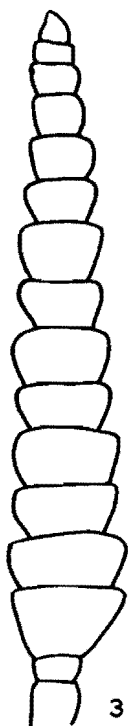
Supra-anal plate narrow, triangular, with a pair of longitudinal lateral callosities and with three pairs of small median tubercles. Cercus short, conical. Subgenital plate short, conical with rounded apex. Epiphallus of usual structure for the genus with large, thick hook-shaped, incurved lophi.

PLATE 3. *Devylideria coryphistoides* Sjöst. Figs. 1—4, female. 1, head, lateral view. 2, ditto, above. 3, antenna. 4, end of abdomen. Figs. 5—11, male. 5, head, lateral view. 6, ditto, above. 7, antenna. 8, end of abdomen, lateral view. 9, ditto, above. 10, hind femur. 11, epiphallus.



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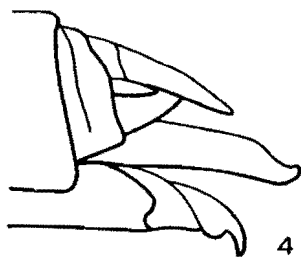
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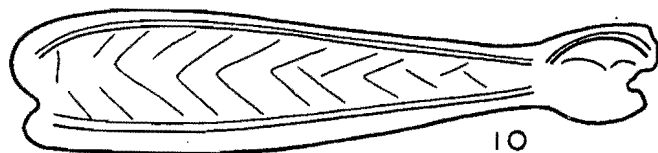
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11



10



9

General colouration brownish, with indistinct brown longitudinal stripes. Lower side of hind tibia blackish.

♀ (Paratype). Larger than the male. Edges of antenna relatively more serrated. Lateral edges of fastigium of vertex convex at the base. Valves of ovipositor slender, narrow with scarcely curved apices.

Length of body ♂ 13, ♀ 24.3; pronotum ♂ 1.8, ♀ 3; hind femur ♂ 6.4, ♀ 9.4 mm.

South Africa. Cape Peninsula, 16.10.1955, 1 ♂, 1 ♀ (B. P. Uvarov).

Named after Mr. D. Botha, with whose help Dr. Uvarov collected this and other interesting species.

***Devylteria capensis* Dirsh 1956 (Pl. 5).**

Beside the originally described series from Maanschijkop and Table Mt. (Cape Province), the following specimens are available: Cape Peninsula, 16.10.1955, 1 ♂, 1 ♀ (B. P. Uvarov).

Genus Eremidium Karsch 1896.

Five species of this genus are already known and two more are described below.

In most cases previous descriptions were based on one sex only. Since both sexes of every species, except one, are now available, a preliminary review of the genus is attempted.

All seven species of the genus differ between themselves so strongly that in future it would be necessary to divide the genus. But the number of species is increasing so rapidly that it is not considered advisable to do it now.

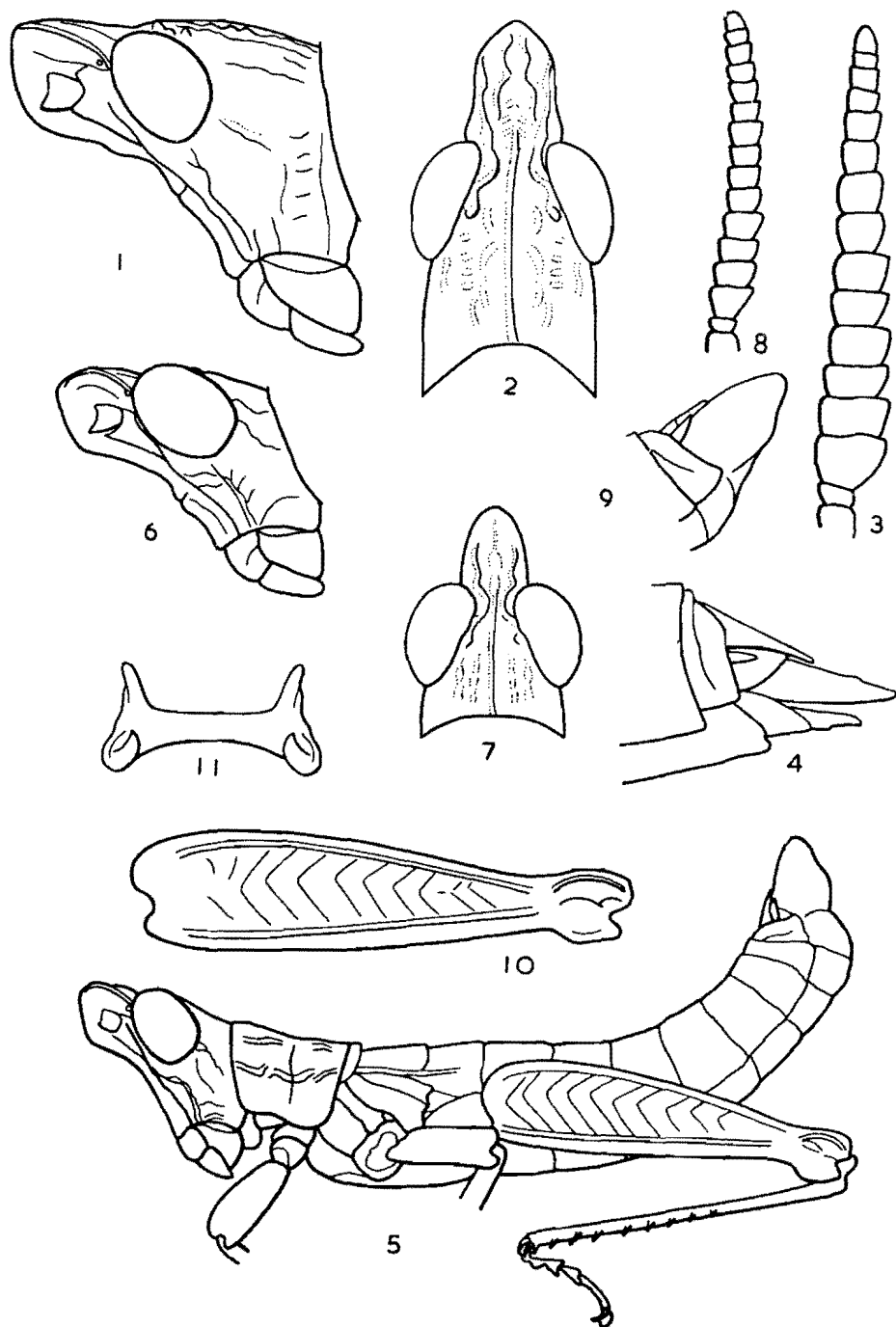
A striking feature of the genus is great sexual dimorphism. The females are larger, with strongly compressed body and tectiform or even strongly tectiform pronotum, while the body of males is not, or very little, compressed and pronotum is subcylindrical or weakly tectiform. A considerable difference between sexes exists also in the shape of fastigium of vertex, but this character has a certain range of variability within a species as well.

Key to species.

♂ ♂

- 1 (2) Cercus with a large internal tooth (Pl. 11, f. 8). Last abdominal tergite dorso-laterally with a pair of long, acute projections (Pl. 11, f. 5). *denticercus* sp.n.
- 2 (1) Cercus without a tooth. Last abdominal tergite without acute projections.

PLATE 4. *Devylteria bothai* sp. n. Figs. 1—4, female. 1, head, lateral view. 2, ditto, above. 3, antenna. 4, end of abdomen, lateral view. Figs. 5—11, male, type. 5, whole insect. 6, head, lateral view. 7, ditto, above. 8, antenna. 9, end of abdomen, lateral view. 10, hind femur. 11, epiphallus.

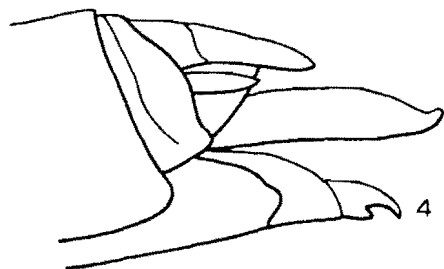
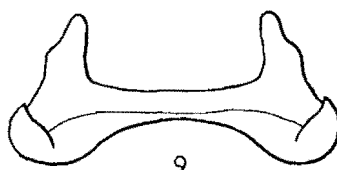
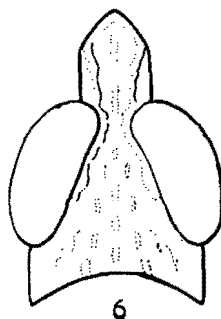
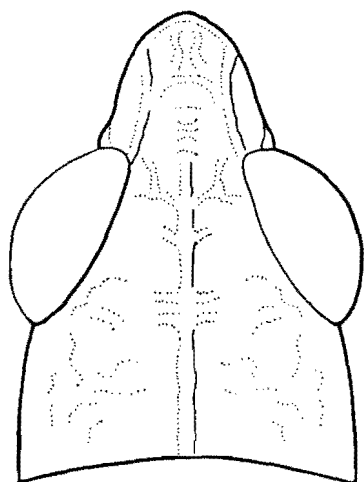
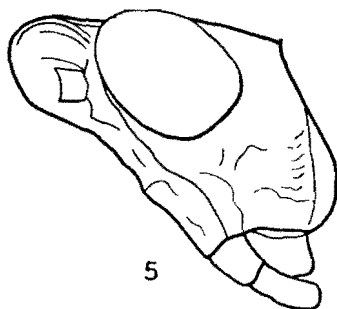
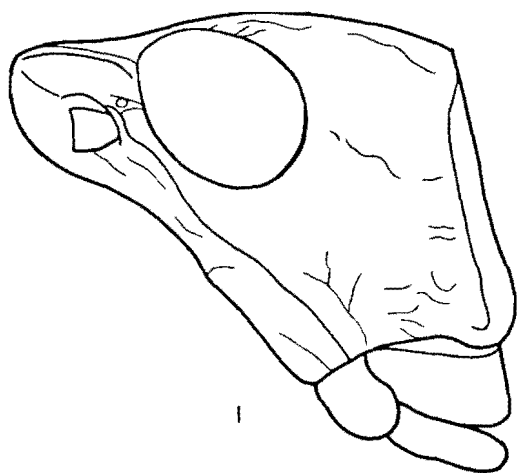


- 3 (4) Cercus with a strongly widened and flattened basal part and narrow apical part with rounded apex (Pl. 7, f. 6). *maius* Ramme
- 4 (3) Cercus conical or curved with slightly or not at all widened basal part, with acute or subacute apex.
- 5 (10) Supra-anal plate triangular.
- 6 (7) Subgenital plate short, with blunt in profile apex (Pl. 8, f. 6). Cercus simple conical (Pl. 8, f. 5). Frontal ridge in upper half twice as wide as the lower one, with parallel, straight carinulae in both parts (Pl. 8, f. 4). *obtusus* Dirsh
- 7 (6) Subgenital plate long, with apex acute in profile. Cercus upcurved or with curved sides. Frontal ridge with sinuate carinulae.
- 8 (9) Subgenital plate with attenuate apex (Pl. 12, f. 6). Cercus with curved sides (Pl. 12, f. 5). Fastigial concavity distinctly separated from frontal sulcus ridge (Pl. 12, f. 4). *curvicercus* sp.n.
- 9 (8) Subgenital plate with acute, but not attenuated apex (Pl. 10, f. 6). Cercus upcurved (Pl. 10, f. 6). Fastigial concavity indistinctly separated from frontal sulcus (Pl. 10, f. 4). *erectus* Dirsh
- 10 (5) Supra-anal plate strongly elongated with broad basal and narrow apical half, apex broadly rounded (Pl. 9, f. 5). *attenuatus* Dirsh

♀ ♀

- 1 (2) Upper margin of pronotum in profile, distinctly arcuate (Pl. 6, f. 3). Frontal ridge comparatively broad (Pl. 6, f. 2). *equuleus* Karsch
- 2 (1) Upper margin of pronotum, in profile, straight or slightly convex, or weakly sinuate.
- 3 (4) Lateral carinae of pronotum distinct (Pl. 10, f. 2). Concavity of fastigium of vertex is indistinctly separated from the frontal sulcus (Pl. 10, f. 1). *erectus* Dirsh.
- 4 (3) Lateral carinae of pronotum indistinct. Concavity of fastigium of vertex distinctly separated from the frontal sulcus.
- 5 (8) Apical angle of vertex seen from above, slightly excised.
- 6 (7) Upper margin of pronotum slightly sinuate in profile (Pl. 9, f. 2). Apex of the head, in profile, rounded (Pl. 9, f. 2). *attenuatus* Dirsh
- 7 (6) Upper margin of pronotum straight in profile (Pl. 8, f. 2). Apex of the head, in profile, angulate (Pl. 8, f. 2). *obtusus* Dirsh
- 8 (5) Apical angle of vertex, seen from above, rounded.

PLATE 5. *Devylteria capensis* Dirsh. Figs. 1—4, female. 1, head, lateral view. 2, ditto, above. 3, antenna. 4, end of abdomen, lateral view. Figs. 5—9, male. 5, head, lateral view. 6, ditto, above. 7, antenna. 8, end of abdomen, lateral view. 9, epiphallus.



- 9 (10) Margin of fastigium of vertex, slightly excurved in profile (Pl. 7, f. 2).
maius Ramme
- 10 (9) Margin of fastigium of vertex incurved in profile (Pl. 11, f. 2, Pl. 12, f. 2).
- 11 (12) Valves of ovipositor straight, apices not curved (Pl. 11, f. 3). Frons almost straight in profile (Pl. 11, f. 2). Concavity of fastigium of vertex very large (Pl. 11, f. 1).
denticercus sp.n.
- 12 (11) Valves of ovipositor with curved apices (Pl. 12, f. 3). Frons incurved in profile (Pl. 12, f. 2). Concavity of fastigium of vertex moderately large (Pl. 12, f. 1).
curvircercus sp.n.

***Eremidium equuleus* Karsch 1896 (Pl. 6).**

This species was described from a single female. The original label of the type, which I studied, reads: "Sud. Africa, Pondoland (Bachman S.)", but in Karsch's description it was stated: "Habitat Africa meridionalis, Marburg (Dr. F. Bachman)". Only the type specimen of the species is known, since the male described by Ramme 1929 as *E. equuleus* belongs to the next species.

***Eremidium maius* Ramme 1929 (Pl. 7).**

1929. *Eremidium maius* ♀ Ramme, Mitt. Zool. Mus. Berlin, 15, 2: 299, Pl. 6, f. 14.
1929. *Eremidium equuleus* ♂ Ramme, l.c.: 298.

My comparison of the type specimens made it clear that *E. maius* described by Ramme on the basis of a single female and the male described by him as that sex of *E. equuleus* Karsch are conspecific. The type locality of the first is Port St. John and of the second Weenen, both in Natal.

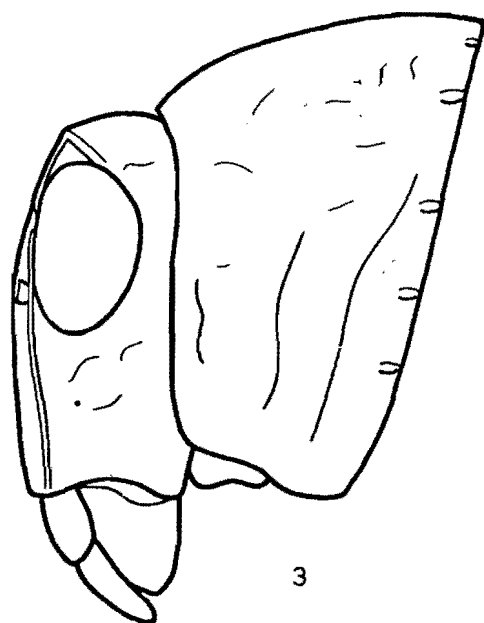
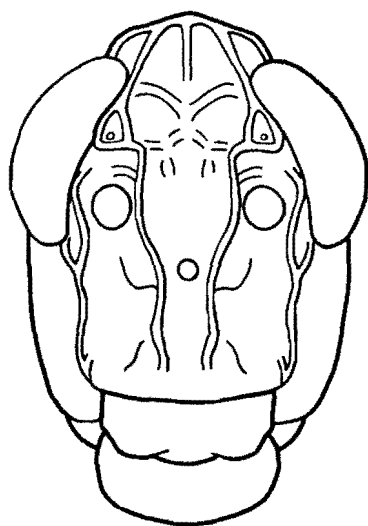
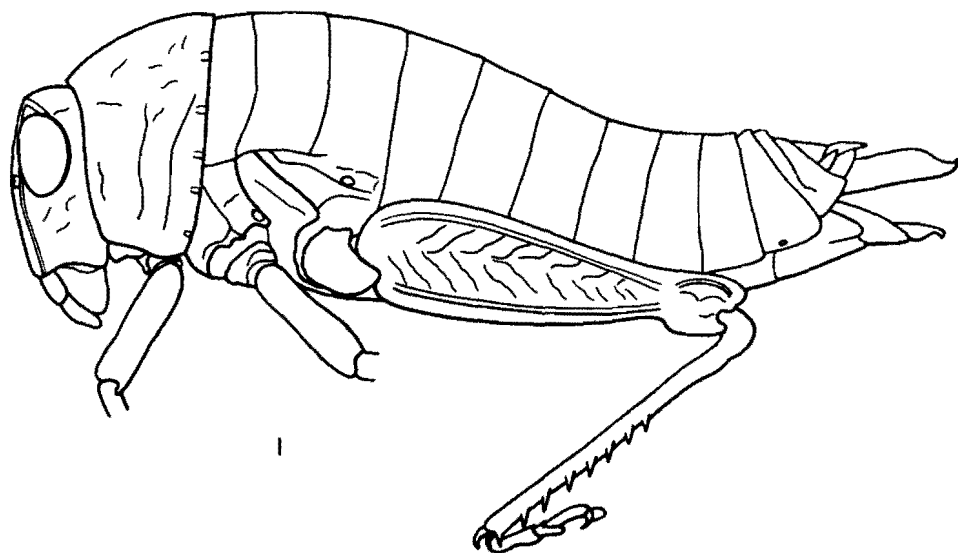
***Eremidium obtusus* Dirsh 1956 (Pl. 8).**

Only the originally described series of this species collected by the Swedish South African Expedition of 1950—51 is known, including specimens from Cape Province; Groot River, Natures Valley; Blou-Kraus River; Tzitzikama Forest, Storm River. Transvaal: Magoeba's Kloof.

***Eremidium attenuatus* Dirsh 1956 (Pl. 9).**

The female of this species was not known.

♀. Larger than the male. Antenna much shorter than head and pronotum together, with sixteen segments. Frontal angle of vertex, seen from above, slightly excised. Fastigium of vertex with a large deep concavity with



rounded lateral margins, formed by strong carinulae. Apex of the head rounded in profile. Pronotum tectiform, with the upper margin slightly sinuate in profile. Lateral carina in prozona indistinct. Supra-anal plate simple, triangular. Subgenital plate weakly trilobate. Valves of ovipositor with curved apices.

General colouration brown. Hind tibia brownish.

Length of body 13.4—14.8, pronotum 2.5, hind femur 6.7 mm.

South Africa. Cape Prov., between Aberdeen and Somerset East 18.10.1955, 2 ♂, 2 ♀ (B. P. Uvarov). Brak Kloof, Nov. 1894, 1 ♂, 1 ♀, Febr. 1895, 1 ♂ (Mrs. G. White).

Only the male type from Uitenhage (Cape Prov.) was known before.

The female is characterised, as the male, by very short hind femur, by the rounded apex of head in profile (Fig. 2), and by the shape of pronotum (Fig. 2). The males vary in the degree of the curvature of cercus.

***Eremidium erectus* Dirsh 1956 (Pl. 10).**

The species was described on the basis of a single male, from Natal National Park. Now a female with identical locality label was found in the material of the British Museum.

♀. Body larger than in the male, compressed laterally. Fastigium of vertex broader in the upper part. Frontal angle of vertex broadly parabolic. Pronotum moderately tectiform. Supra-anal plate simple, triangular. Subgenital plate weakly trilobate. Valves of ovipositor with weakly curved apices.

Length of body 17, pronotum 3.2, hind femur 18 mm.

South Africa. Natal National Park, March 1932, 1 ♂ (type), 1 ♀ (Miss A. Mackie).

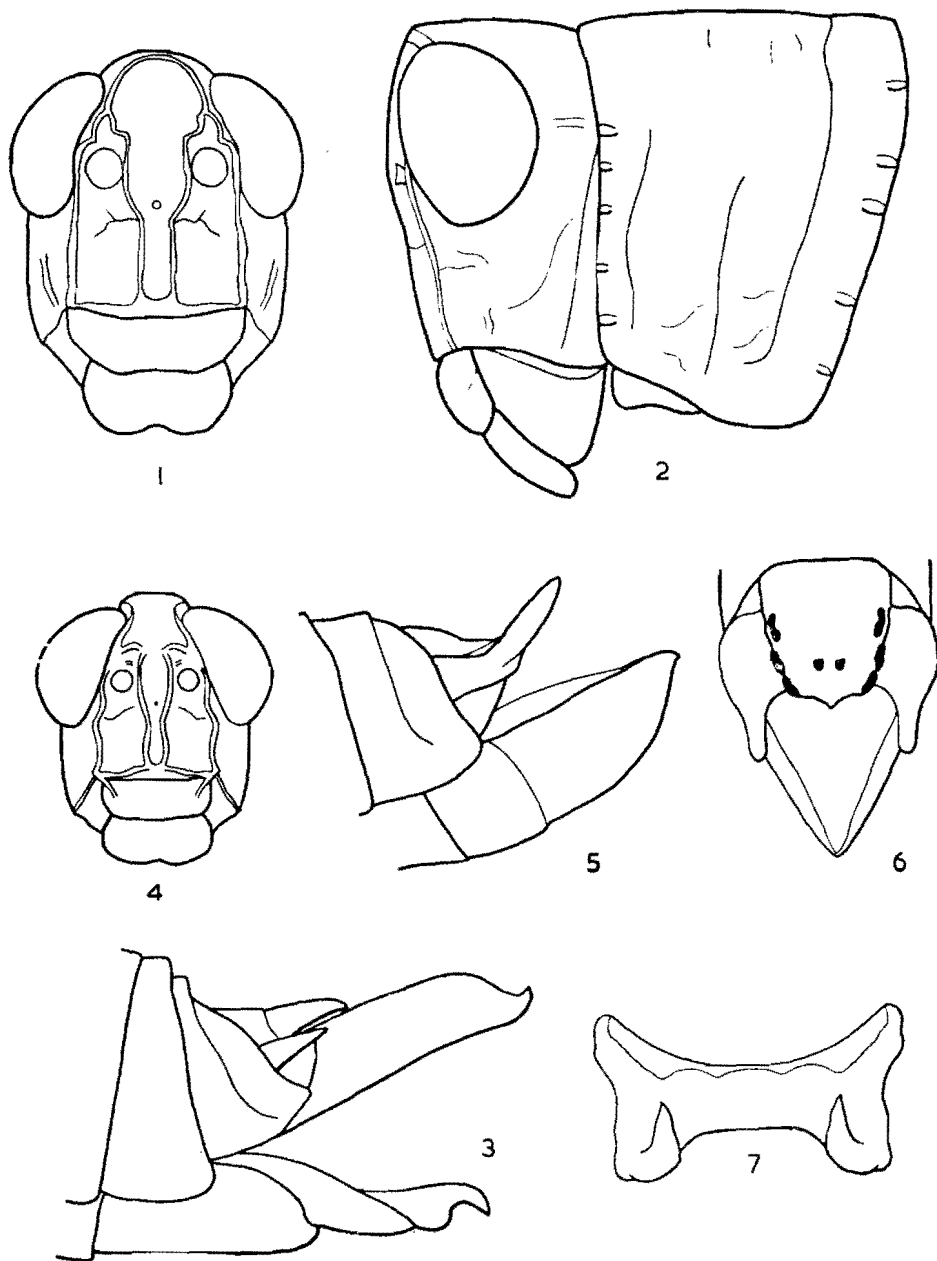
***Eremidium denticercus* sp.n. (Pl. 11).**

Type ♂. South Africa. Transvaal, Woodbush. Transvaal Museum.

Body small, moderately slender and rugulose. End of abdomen slightly upcurved.

Antenna slightly shorter than head and pronotum together, filiform, with eighteen segments. Fastigium of vertex elongated, with deep concavity, which is continuous with the sulcus of frontal ridge; its edges are with high sharp carinulae, which are continuous with the facial and frontal ridges; apical angle of vertex, seen from above, almost truncate. Frons, in profile, straight, sloping backwards; frontal ridge in basal half low, with low, slightly divergent carinulae; in upper half broadened, with high, slightly excurved carinulae, with a deep concavity between them and a short deep furrow in the middle. Facial carinulae strong, slightly sinuate. Occipital carinula and

PLATE 7. *Eremidium maius* Ramme. Figs. 1—3, female, type. 1, face, in horizontal position. 2, head and pronotum lateral view. 3, end of abdomen, lateral view. Figs. 4—7, male. 4, face. 5, end of abdomen, lateral view. 6, ditto, above. 7, epiphallus.



marginal carinulae of vertex distinct. Ocelli rudimentary. Pronotum weakly tectiform, with median carina distinct; lateral carina absent; disc crossed only by the third transverse sulcus, the first and second sulci are noticeable only on lateral lobes; prozona about four times as long as metazona; posterior margin of metazona slightly excised in the middle; on the lateral lobes of pronotum, in the middle, there is a longitudinal callous stripe; lower margin of the lobe slightly sinuate, Prosternal tubercle conical, with very broad base and acute, slightly attenuate apex, in profile, its anterior margin is straight, posterior one convex. Mesosternal interspace slightly wider than its length. Metasternal interspace elongated. Hind femur short, ratio of length to width about 3.5. Arolium large, but shorter than a claw.

Last abdominal tergite, on the dorsal side, with a pair of long pointed projections. Supra-anal plate triangular, trilobate at the apex, with the median projection longer than the lateral ones; on the apical half there is a pair of elongated lateral callosities; on the basal half there are two pairs of small tubercles. Cercus strong, acutely-conical on the internal side of the upper half, with a large recurved tooth. Subgenital plate strongly upcurved with acute apex.

Epiphallus with broad bridge, comparatively small ancorae and long hook-shaped lophi. Lateral plates of medium size.

General colouration brownish. On each side of body there runs a broad, brown stripe. Callous stripe on lateral lobes of pronotum dirty yellowish. Basal third of hind tibia brownish, the rest blackish. Callosities and tubercles of the supra-anal plate black.

♀ (Paratype). Larger than the male. Fastigium of vertex short and broad, with a less deep concavity. Pronotum tectiform. Supra-anal plate simple, triangular. Subgenital plate with slightly sinuate apical margin. Valves of ovipositor straight with apices scarcely curved.

General colouration brown. Hind tibia brown.

Length of body ♂ 14, ♀ 18.2—20.3; pronotum ♂ 2.8, ♀ 3.3—3.4; hind femur ♂ 6.8, ♀ 8.2—8.4 mm.

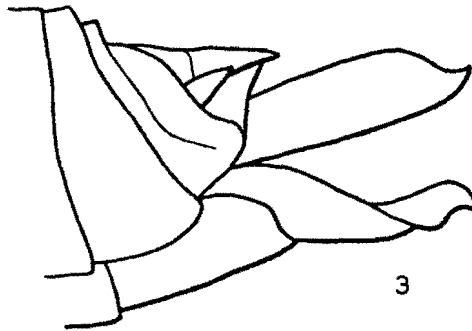
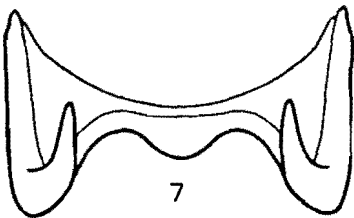
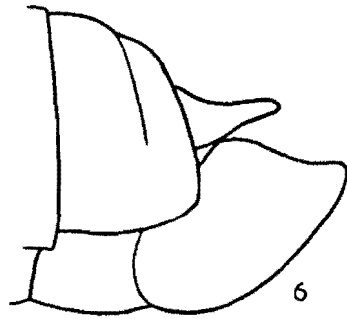
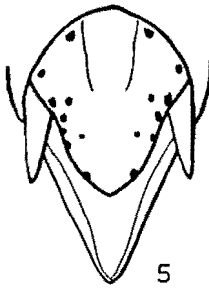
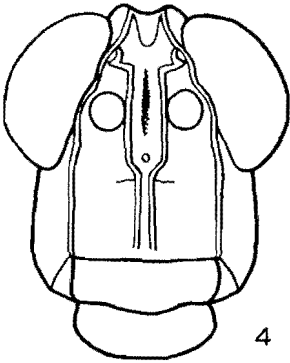
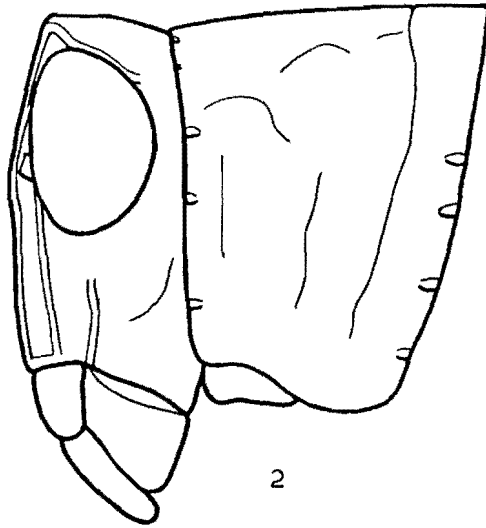
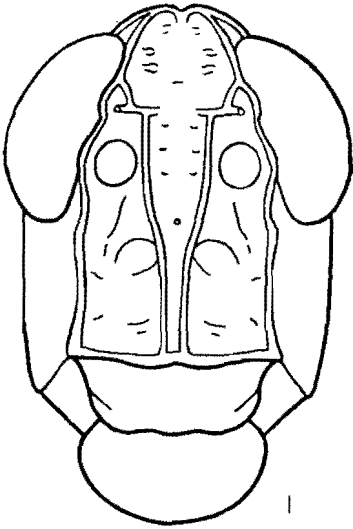
South Africa. Transvaal, Woodbush, November 1942, 1 ♂, 5 ♀ (G. van Son) Transvaal Museum.

The new species is strongly different from others by the presence of long pointed projections on the last abdominal tergite and by toothed cercus. These characters may be of generic value, and it is retained in *Eremidium* only provisionally.

***Eremidium curvicercus* sp.n. (Pl. 12).**

Type ♂. South Africa. Cape Prov. Hogs Back. British Museum (Natural History).

PLATE 8. *Eremidium obtusus* Dirsh. Figs. 1—3, female. 1, face, in horizontal position. 2, head and pronotum, lateral view. 3, end of abdomen, lateral view. Figs. 4—7, male. 4, face. 5, end of abdomen, above. 6, ditto, lateral view. 7, epiphallus.



Body small, moderately slender and rugulose. End of abdomen slightly upcurved.

Antenna shorter than head and pronotum together, slightly compressed in the basal part, with seventeen segments. Fastigium of vertex comparatively small, elongated, with very deep concavity, which is continuous with the sulcus of frontal ridge; its edges form high carinulae, which are continuous with the facial and frontal ridges; apical angle of vertex, seen from above, slightly excised. Frons, in profile, sloping backwards; frontal ridge in basal half low and narrow, with low and almost parallel carinulae; in upper half the ridge about twice as broad with high, sharp, slightly excurved carinulae and a deep concavity between them and a narrow furrow in the middle. Facial carinula strong, slightly sinuate. Occipital carinula and marginal carinulae of vertex distinct. Ocelli rudimentary. Pronotum subcylindrical, with median carina distinct; lateral carina irregularly incurved, callous, exists only in prozona; disc crossed by the third transverse sulcus, the first and second being noticeable only on lateral lobes; prozona about four times as long as metazona. Posterior margin of metazona straight; in the middle of the lateral lobe there is a broad, longitudinal callosity; lower margin of the lobe sinuate. Prosternal tubercle low, broadly conical, in profile its anterior margin is straight, the posterior convex. Mesosternal interspace wider than its length. Metasternal interspace longer than its width. Hind femur short, ratio of length to width about 3.5. Arolium large, as long as a claw.

Supra-anal plate short, triangular with a pair of apical lateral callosities on the edges of the plate, with one large and two small median tubercles in the apical half and a transverse row of small tubercles in the middle of the basal half. Cercus slender, slightly curved, with acute apex. Subgenital plate long, acute, with pointed apex.

Epiphallus with comparatively broad bridge, strong ancorae and long hook-shaped lophi; lateral plates of medium size.

General colouration brownish. Callosity on the lateral lobe of pronotum ochraceous. Hind femur and tibia light green; the upper lobe of the knee brownish-yellow; spines of hind tibia with brown apices. Callosities on the supra-anal plate black.

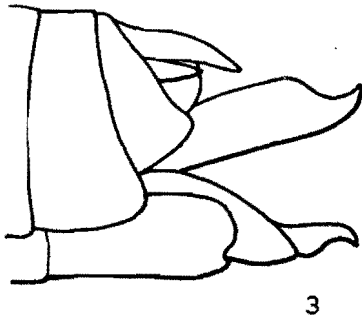
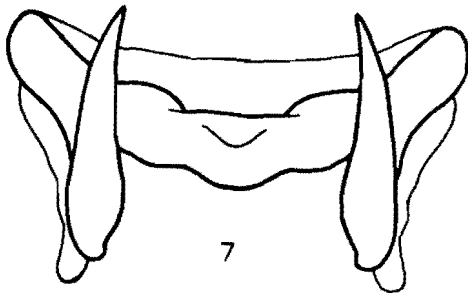
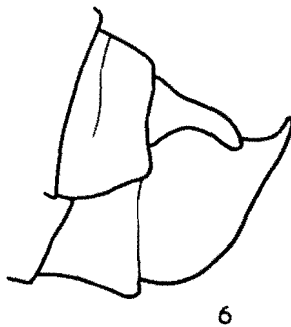
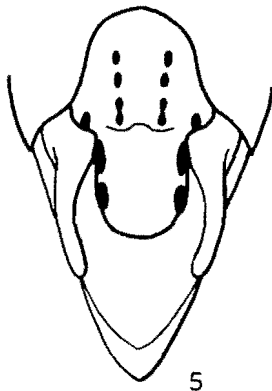
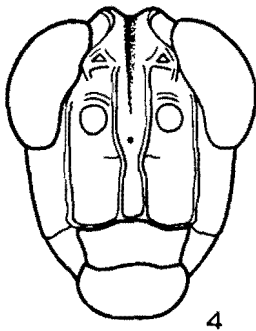
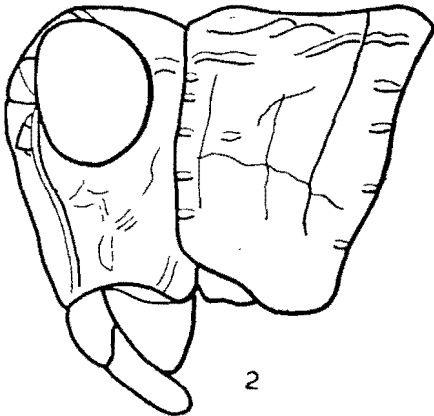
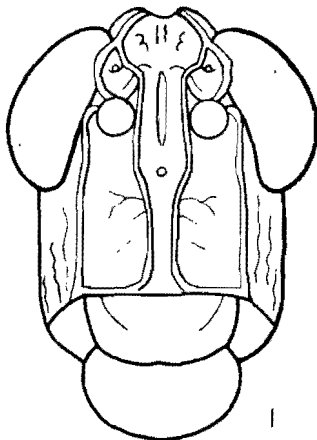
♀ (Paratype). Larger than the male. Fastigium of vertex broader, with less deep concavity; apical angle of vertex rounded. Pronotum tectiform; lateral carina in anterior part of prozona distinct. Supra-anal plate simple, triangular. Subgenital plate scarcely trilobate. Valves of ovipositor with curved apices.

General colouration brown. Hind femur and tibia brown.

Length of body ♂ 12, ♀ 16.6; pronotum ♂ 2, ♀ 2.9; hind femur ♂ 6, ♀ 7.2 mm.

South Africa. Cape Prov. Hogs Back. 1 ♂, 1 ♀.

PLATE 9. *Eremidium attenuatus* Dirsh. Figs. 1—3, female. 1, face, in horizontal position. 2, head and pronotum, lateral view. 3, end of abdomen, lateral view. Figs. 4—7, male. 4, face. 5, end of abdomen, above. 6, ditto, lateral view. 7, epiphallus.



Owing to the general shape of the supra-anal, subgenital plate and cercus the new species may be placed in vicinity of *E. erectus* Dirsh, but they differ strongly in these characters and there are even greater differences in the structure of face, pronotum and epiphallus (see Pls. 10, 12).

***Lithidium bushmanicum* sp.n. (Pl. 13).**

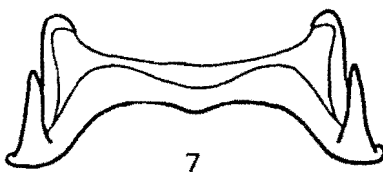
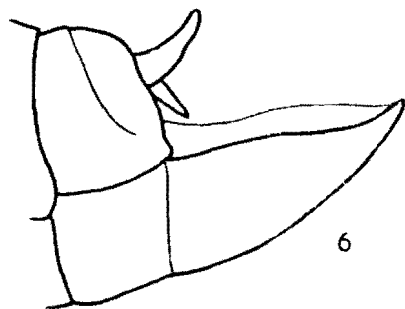
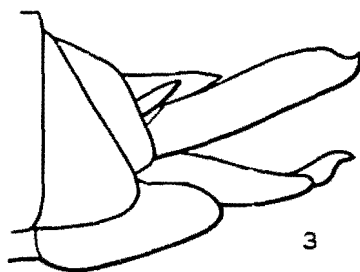
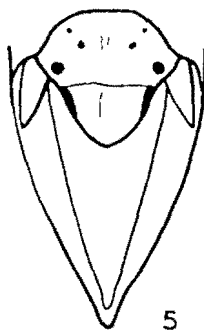
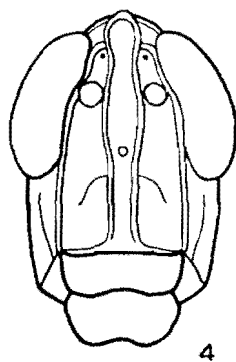
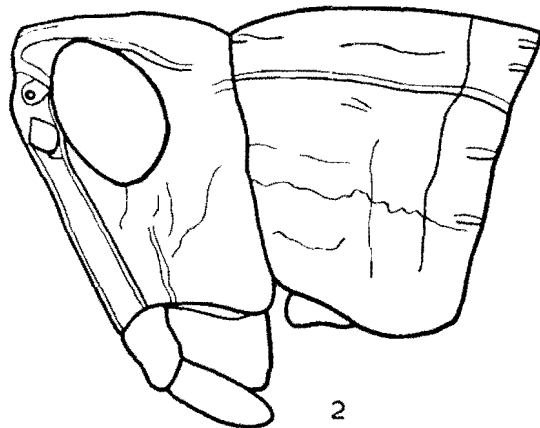
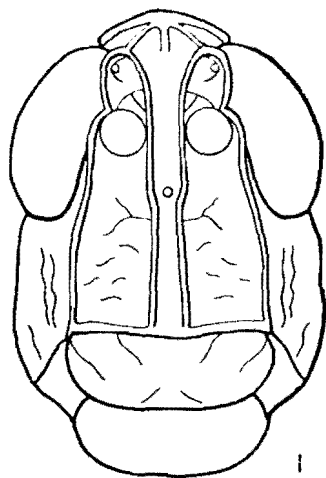
Type ♀. South Africa, Bushman Land, Viools Drift. Transvaal Museum.

Body spindle-shaped, widest at metathorax, of medium size, comparatively large for the genus, and moderately rugulose.

Antenna filiform, shorter than head and pronotum together, with eighteen segments. Fastigium of vertex broad, short, strongly sloping forwards, seen from above truncate; its upper surface rugulose, with a pair of irregular lateral carinulae. Frontal ridge, in upper half, low, broad, weakly concave, almost flat, with punctured surface; at the ocellus narrowing and downwards almost obliterated; facial carinulae strong and broad; whole face strongly rugulose. Frons, in profile, slightly sloping backwards. Occiput globular. Eye small, strongly convex, approximately oval. Ocelli fully developed, large, the lateral ones located on the large tubercles. Pronotum short and broad, widened backwards; median carina low, represented by a row of disconnected elongated, tubercle-like convexities; lateral carina, in prozona strong, callous-like, irregular, parallel; in metazona represented by elongated tubercle-like convexities; whole surface strongly rugulose; two distinct transverse sulci on its dorsal surface are connected in the middle; prozona slightly longer than metazona; posterior margin of metazona in the middle, with small rounded excision. Lateral lobe higher than its length. Mesonotum short, produced beyond the pronotum; metanotum shorter than pronotum, moderately rugulose. Prosternal projection collar-like, short and moderately low, with thick base, narrowing towards apex, which is shallowly excised. Mesosternal interspace slightly broader than its length, with its sides parallel; mesosternal lobes rectangular. Metasternal interspace obliterated. Abdomen above with a thin longitudinal carina interrupted at the end of each tergite. Anterior and middle legs moderately short; hind femur moderately wide with strongly convex, regular fish-bone sculpture; tibia slightly shorter than the femur; tarsus about half as long as the tibia. Arolium large, about as long as a claw. Supra-anal plate elongate, triangular, with a transverse furrow in the middle. Subgenital plate with the apex weakly trilobate and with a pair of small, round fenestra-like formations. Ovipositor short, with relatively slender, apically curved valves; lower valve with a large, elongated lateral projection, with rounded apex.

General colouration light sandy-brownish. External side of hind femur whitish-grey; upper lobe of hind knee dark grey; the internal and lower side

PLATE 10. *Eremidium erectus* Dirsh. Figs. 1—3, female. 1, face, in horizontal position. 2, head and pronotum, lateral view. 3, end of abdomen, lateral view. Figs. 4—7, male. 4, face. 5, end of abdomen, above. 6, ditto, lateral view. 7, epiphallus.



light-yellowish. Hind tibia above greyish, below brownish; spines greyish with brown apices.

Length of body 19.7, pronotum 3.4, hind femur 10.2 mm.

Only type specimen collected 13.10.1950 by Dr. G. van Son is known.

The new species differs from the two known ones, *L. pusillum* Uvarov 1925 and *L. rubripes* Uvarov 1929, by the larger size, more slender body, less inflated in the metathoracic region, the fastigium of vertex much more projecting in front of the eyes and by the comparatively slender and more elongated hind femur.

Gen. *Eneremius* Saussure 1888.

The genus and species was described from a single female *Eneremius mutus* Sauss. The type, which is preserved in the Geneva Museum was studied and figured (Dirsh 1956). The second species of the genus *Eneremius mendax* (Karny 1910) was very insufficiently described, but later the type was studied and figured by Uvarov (1929, Ann. S. Afr. Mus. 29, 1: 58). Since the type is now lost, this figure is the only reliable source for recognising the species. Below, three more species are described. As will be seen from the descriptions and figures, the new species are so different between themselves and from the two known species, that they might be referred to different genera. They are however, placed temporarily in the same genus on the basis of two characters: presence of the apical external spine of the hind tibia and similarity in the structure of the meso- and metasternum.

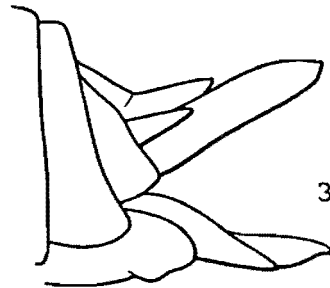
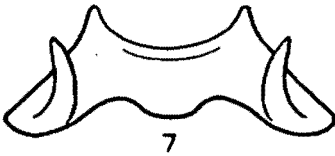
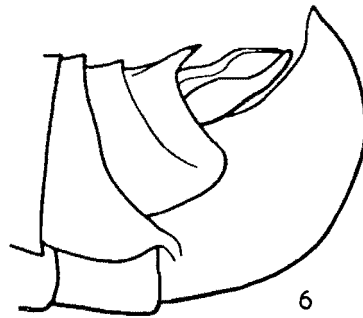
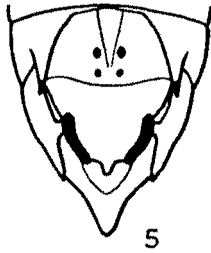
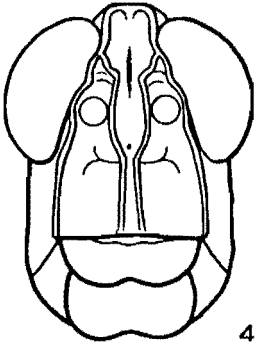
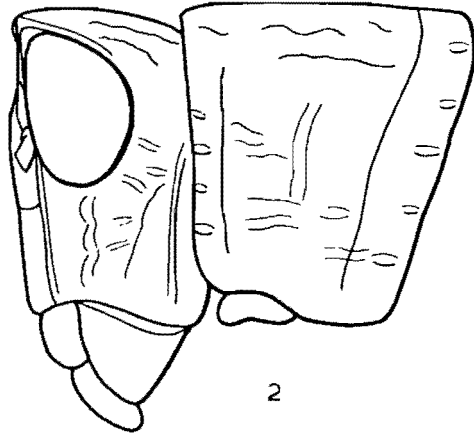
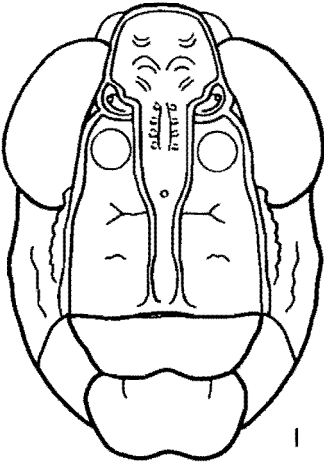
***Eneremius carinatus* sp.n. (Pl. 14).**

Type ♀. South Africa, Bushman Land, Viools Drift. Transvaal Museum.

Of medium size, robust; body broadened in metathoracic region and strongly flattened, with lateral carinae.

Antenna thin, filiform, with seventeen segments. Fastigium of vertex sloping forwards and protruding in front of the eyes, broadly triangular, with carinate margins and flat rugulose surface. Frons, in profile, vertical, with fastigium of vertex protruding angularly. Frontal ridge low, with sharp carinulae and a shallow sulcus throughout; narrow in the upper part, strongly widened at the ocellus, narrowing below it and widened at the base. Facial carina strong, irregular; the whole face rugulose. Eye small, strongly convex, almost round. Ocelli very small, the lateral ones rudimentary. Median occipital carinula present. Pronotum short, flat, with excurved callous lateral carinae; median carina indistinct; two weak transverse sulci are noticeable on the dorsal surface, only the basal one crossing the disc; metazona half the length of prozona, with posterior margin incurved; the whole surface

PLATE 11. *Eremidium denticercus* sp. n. Figs. 1--3, female. 1, face, in horizontal position. 2, head and pronotum, lateral view. 3, end of abdomen, lateral view. Figs. 4--8, male, type. 4, face. 5, end of abdomen, above. 6, ditto, lateral view. 7, epiphallus. 8, cercus.



rugulose and tuberculate, particularly near the lateral carinae; lateral lobe higher than its length with almost straight anterior and posterior and sinuate lower margin. Meso- and metanotum short, flat, rugulose, with weak median and distinct lateral carinae, which are continuous with the pronotal carinae. Prosternal projection low, collar-shaped with thick base, narrowing towards apical margin. Mesosternal interspace short and broad, three times as broad as its length; mesosternal lobe oblique, with sinuate margin; metasternal interspace twice as broad as its length. Dorsal surface of abdomen flattened and rugulose, with linear median carinula up to the seventh tergite and with strong callous lateral carinae, which are interrupted at the end of each tergite. Anterior and middle legs moderately thick. Posterior femur comparatively slender, externally with strongly convex fish-bone ridges. Hind tibia about as long as the femur, slightly excurved; hind tarsus short; arolium large, shorter than a claw. Supra-anal plate narrow triangular, with transverse sulcus in the middle. Subgenital plate with triangular projection at the apex. Ovipositor valves comparatively slender, short, with weakly curved apices; lower valve with a small lateral projection.

General colouration brownish; whole dorsal surface sandy-brownish; sides greyish-brown; ventral surface greyish. Hind femur sandy-brownish, internal side between carinulae black; knee greyish; hind tibia sandy-greyish; its spines of the same colour, with brownish apices.

Length of body 23, pronotum 5, hind femur 10.7 mm.

Only female type collected 13.9.1950 by Dr. G. van Son, is known.

This is a highly aberrant species and its proper position can only be decided after studying a male.

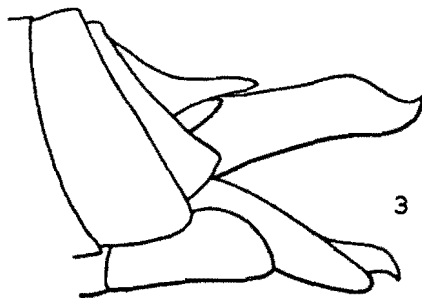
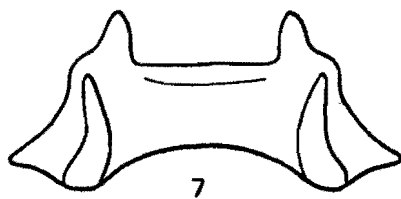
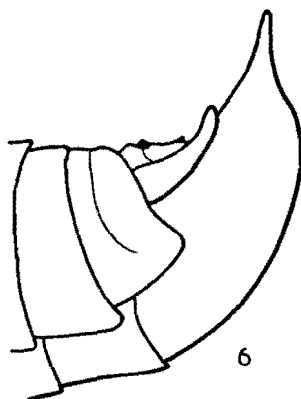
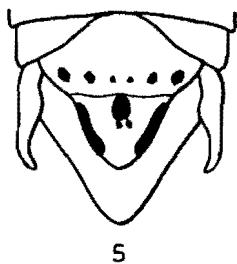
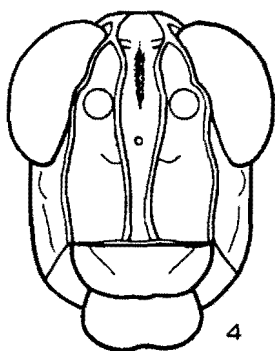
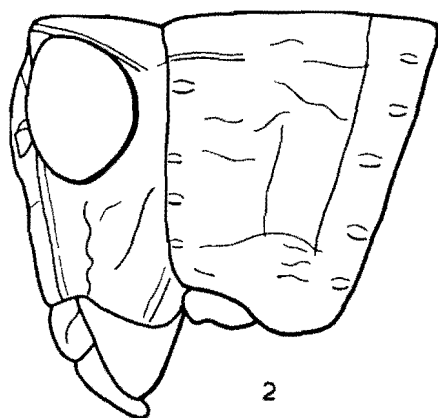
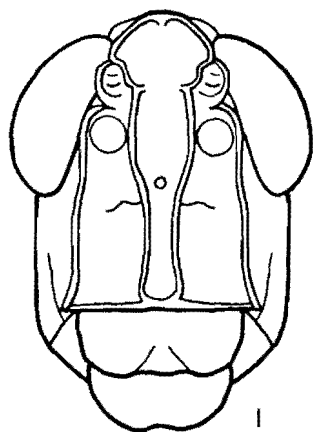
***Eneremius pallidus* sp.n. (Pl. 15).**

Type ♀. South Africa. Bushman Land, Pella. Transvaal Museum.

Body of medium size, moderately widened in metathoracic region, moderately rugulose and tuberculate.

Antenna filiform, shorter than head and pronotum together, with seventeen segments. Head above globular; fastigium of vertex broad, roundly sloping forwards, at the apex broadly rounded, with projecting frontal ridge and with small tubercles on the sides. Frons vertical, in the upper half with roundly projecting frontal ridge; seen from the front frontal ridge is inflated laterally, with slightly convex surface and weak lateral carinulae; below the ocellus the ridge is obliterated. Facial carinulae low, irregularly undulated. Short, weak occipital carinula present. Eye small, strongly convex, almost round. Ocelli small, rudimentary. Pronotum short and broad, widened behind, with weakly convex dorsal surface; median carina weak, linear; lateral carina represented only by tubercles only in anterior half of prozona; two distinct

PLATE 12. *Eremidium curvicercus* sp. n. Figs. 1—3, female. 1, face, in horizontal position. 2, head and pronotum, lateral view. 3, end of abdomen, lateral view. Figs. 4—7, male, type. 4, face. 5, end of abdomen, above. 6, ditto, lateral view. 7, epiphallus.



transverse sulci cross the disc; prozona twice as long as metazona; posterior margin of metazona almost straight, undulated and tuberculate; the whole surface with small sparse tubercles; lateral lobe higher than its length, the anterior and posterior margins almost straight; lower margin slightly sinuate. Meso- and metanotum short, metanotum with a pair of lateral tubercles. Prosternal projection low, collar-shaped, with thick basal part narrowing toward apical margin. Mesosternal interspace three times as broad as its length; mesosternal lobe rounded with oblique posterior margin; metasternal interspace about three times as broad as its length. Abdominal tergites at the posterior margins each with a median tubercle and with lateral callosities. Anterior and middle legs short; hind femur short, broad and thick, with deep, irregular sculpture on the external side; upper carina undulated, lower one irregular; hind tibia about as long as the femur external apical spine small; tarsus shorter than half of the tibia; arolium large, almost as long as a claw. Supra-anal plate broadly triangular, in the middle with incomplete transverse sulcus. Subgenital plate with straight apical margin. Ovipositor valves short, weakly curved at the apices; lower valve with a small lateral projection.

General colouration uniformly light sandy-brownish. Hind femur on the lower internal part bright red (Pl. 15, fig. 5, dotted) the basal half of internal side with a large and in apical part with small black spots. Hind tibia and spines of the same colour as the body.

Length of body 26 (probably stretched), pronotum 4.4, hind femur 9.7 mm.

Only the female type, collected 26—27 August 1950 by Dr. G. van Son is known.

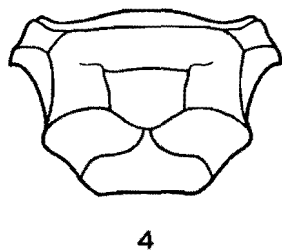
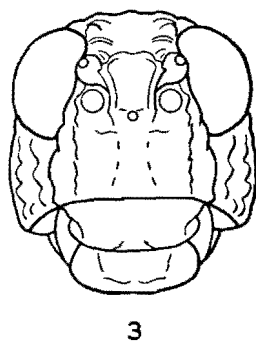
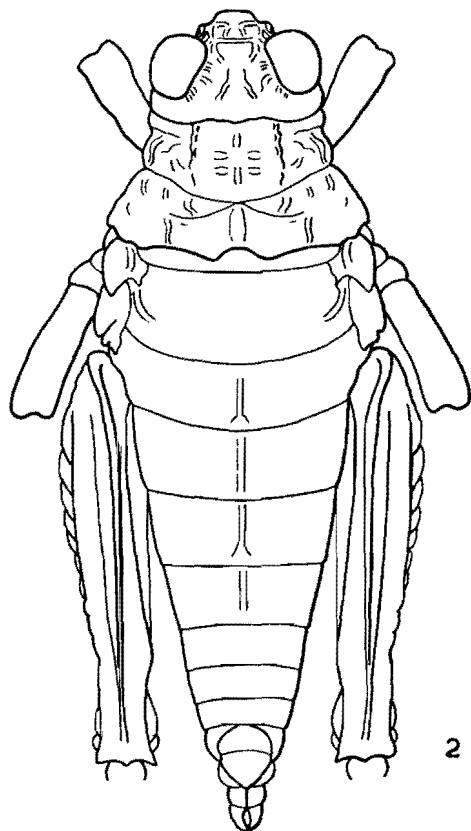
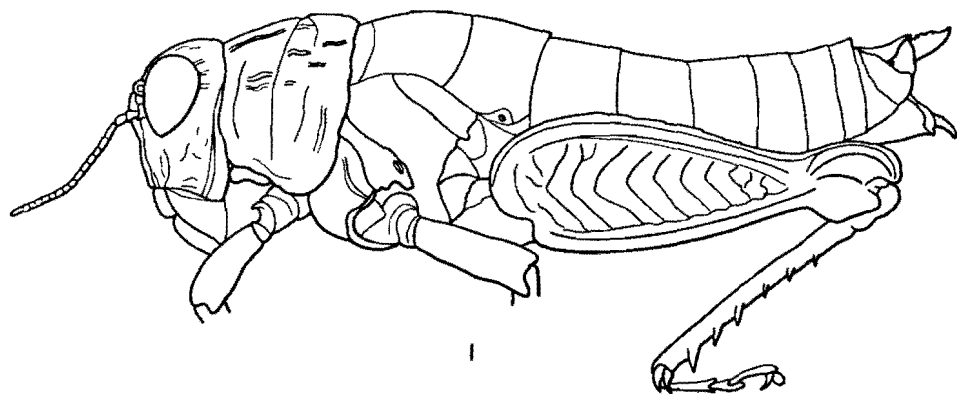
This species strongly differs from other known species of the genus by the shape of head, shape of fastigium of vertex, frontal ridge and the sculpture of the pronotum.

***Eneremius namaquensis* sp.n. (Pl. 16).**

Type ♀. South Africa, Namaqualand, Springbok. National Museum of Southern Rhodesia.

Body of medium size, moderately widened in metathoracic region, strongly tuberculate and rugulose.

Antenna shorter than head and pronotum together, filiform, with seventeen segments. Fastigium of vertex broadly triangular, sloping forwards, slightly concave, with marginal carinulae and rugulose surface. Frons vertical; frontal ridge low, with shallow sulcus and low lateral carinulae, which are gradually diverging downwards. Facial carinae strong, undulating; whole head strongly rugulose and tuberculate. Eye small, strongly convex, almost round; ocelli small. Pronotum short, widened towards posterior end; strongly tuberculate; median carina interrupted and represented by elongated tubercles; lateral carinae tuberculate and undistinguishable from the parallel rows of similar



tubercles; three transverse sulci are distinct on the dorsal surface; metazona half the length of the prozona, with undulated posterior margin; lateral lobe higher than its length, with slightly excurved and undulate posterior and weakly sinuate lower margin. Meso- and metanotum short, tuberculate. Prosternal projection low, collar-shaped, with broad base. Mesosternal interspace twice as broad as its length; mesosternal lobe short, transverse, with rounded internal angle; metasternal interspace short and broad. Abdomen strongly rugulose and tuberculate. Anterior and middle legs moderately thick. Hind femur moderately short and broad, thick, with regular, rather convex sculpture on the external side. Hind tibia shorter than the femur; tarsus less than half the length of tibia; arolium large, as long as a claw. Supra-anal plate in apical half narrow triangular, in the middle with transverse furrow. Subgenital plate with broadly triangular apex. Ovipositor valves short, slender, weakly curved at apices; lower valve with a small rounded lateral projection.

General colouration greyish-brown. Lower half of lateral lobe of pronotum dirty-ochraceous. The base of the internal side of hind femur with a large elongated black spot. Hind tibia and its spines dirty-ochraceous; apices of the spines brown.

Length of body 17.5—20, pronotum 3, hind femur 9 mm.

The female type and three female paratypes from the same locality, were collected in October 1940 by R. H. N. Smithers.

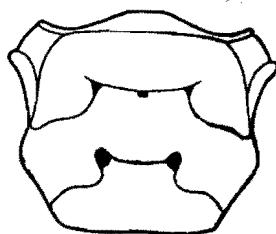
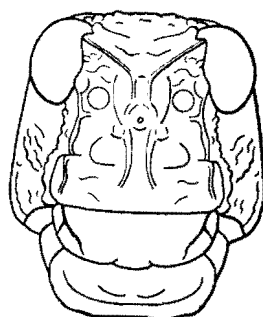
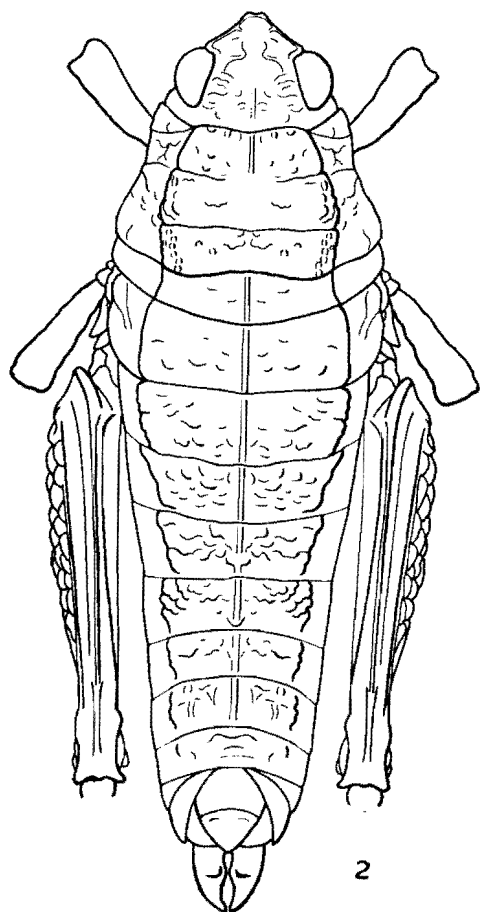
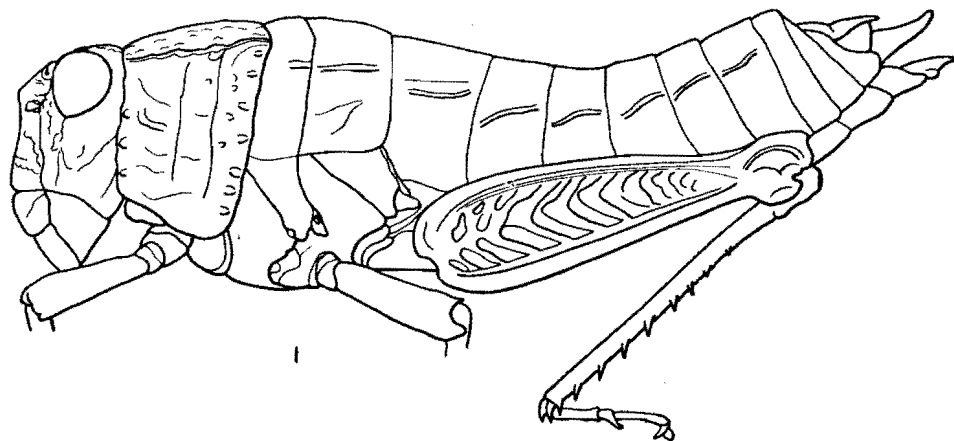
The paratypes have no structural differences from the type. Two paratypes differ by the dirty-ochraceous colouration of the basal half of the external side of hind femur and by the absence of the black spot on its internal side.

The new species strongly differs from other known species of the genus by the structure of the head, shape of fastigium of vertex, shape of frontal carina and the sculpture of pronotum.

Uvarovidium gen.n.

Body small. Antenna slightly shorter than head and pronotum together, thick, filiform, with sharply separated segments. Fastigium of vertex triangularly projecting in front of the eyes, with thick marginal carinulae, the lateral ones high and almost parallel; middle of the fastigium deep, concave. Eyes small, strongly convex. Frontal ridge above the ocellus, projecting forwards; in upper part very thin lamelliform without a sulcus. Facial carinulae strong.

Pronotum short, subcylindrical, its anterior and posterior margins straight; median carina sharp; lateral carina weak, irregular, formed by callosities; transverse sulci indistinct. Prosternal tubercle short and broad. Mesosternal interspace slightly longer than its width; mesosternal lobe rounded; metasternal interspace elongated, open. Elytra and wings completely absent. Tympanum



absent. Hind femur moderately broad. External apical spine of the hind tibia present. Arolium large, slightly longer than a claw. Male supra-anal plate with lateral marginal sclerotizations. Cercus short, conical. Subgenital plate short, compressed laterally in upper apical part. Female supra-anal plate simple, triangular. Subgenital plate weakly trilobate. Ovipositor valves short, curved at the apices; lower valve with a large rounded lateral projection.

Phallic complex: Penis completely divided in the basal and the apical valves. Ejaculatory sac small; spermatophore sac small located between the valves of penis; ventral slit of the phallotreme very long. Epiphallus bridge-shaped, with large ancorae, hook-shaped lophi and small lateral plates. Oval sclerites large, elongated.

Type-species: *Uvarovidium peninsulare* sp.n.

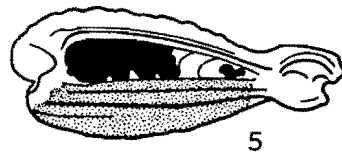
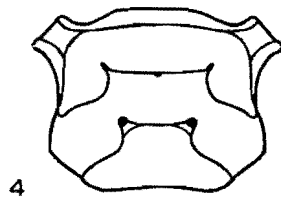
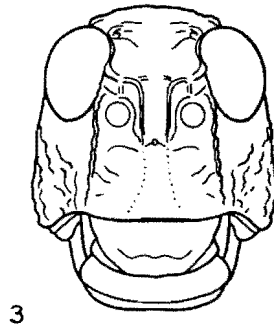
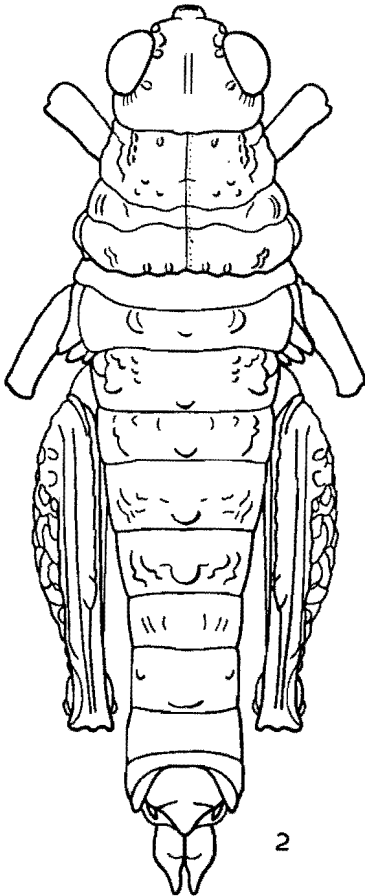
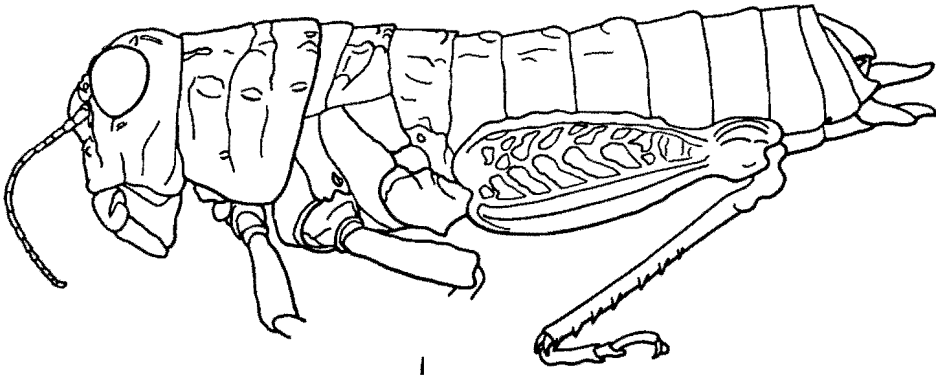
Owing to the absence of wings and tympanum the new genus resembles superficially representatives of the family *Lentulidae*, but the divided valves of the penis indicate its place in the subfamily *Hemiacridinae* of *Acrididae*. In this subfamily the position of the new genus is in the vicinity of the genus *Calviniacris* Dirsh 1956, with which it shares such characters as the absence of wings and tympanum and the similar fastigium of vertex. However, the frontal ridge in *Uvarovidium* is thin and strongly projecting forwards above the ocellus, when in *Calviniacris* it is comparatively thick and scarcely projecting forward. Median carina of pronotum in the new genus is sharp and lateral carinae present, while in *Calviniacris* the median carina is weak and lateral ones almost obliterated. Transverse sulci in *Uvarovidium* are indistinct, whereas in *Calviniacris* the basal transverse sulcus is deep.

***Uvarovidium peninsulare* sp.n. (Pl. 17).**

Type ♂. South Africa, Cape Peninsula. British Museum (Natural History).

Body lustrous, although the surface is wrinkled. Antenna with seventeen segments. Fastigium of vertex broadly triangular. Frontal ridge at the ocellus, forms small, slit-like elongated concavity, below which the ridge is becoming again lamelliform; at the base its carinulae are suddenly diverging. Lateral lobe of pronotum higher than its length. Meso- and metanotum with lateral carinae, which represent continuations of the pronotal carinae and extend further on the abdominal tergites. Prosternal tubercle apically cuneiform. Mesosternal lobe as long as broad. Lower carina of the hind femur irregularly serrated. Last abdominal tergite with expanded sides forming large lateral lobes. Supra-anal plate with broad slightly incurved apical margin and a pair of latero-apical strong, elongated sclerotizations; in profile it has a broadly rounded apex.

PLATE 15. *Eneremius pallidus* sp. n. female, type. Fig. 1, whole insect, lateral view. 2, ditto, above. 3, face. 4, meso- and metasternum. 5, hind femur, internal side, red coloured part is dotted.



Phallic complex: zygoma and apodemes of cingulum very strong and robust; rami form posterior continuation, with a very broad rounded apex and completely cover the apical valves of penis; this formation is covered with longitudinal serrated ridges and functionally represents the aedeagus.

General colouration olive-green, with a dirty-ochraceous stripe along the lateral carinae of pro-, meso-, metanotum and abdomen, and with a similar stripe behind the eye and along the middle of the lateral lobe of pronotum. Hind femur externally with indefinite, diffused darkening; internally uniformly ochraceous-brownish. Hind tibia brownish-red. Sclerotizations of the supra-anal plate and on the upper angle of the last abdominal tergite are black.

♀ (Paratype). Larger than the male. Median carina of pronotum less developed; the lateral ones absent or scarcely marked; carinae on the meso-, metanotum and abdomen absent. Lower carina of the hind femur not serrated. Valves of ovipositor moderately curved.

Length of body ♂ 10.6—11.2, ♀ 14.7—18; pronotum ♂ 2.2, ♀ 3—3.2; hind femur ♂ 7.3—7.6, ♀ 9—9.4 mm.

The species represents a certain range of variability in the shape of the male supra-anal plate, the apical margin of which is slightly incurved in the type, but may be straight, excurved and, in extreme variation, with small rounded projection (Pl. 17, f. 6, 7).

South Africa: Cape Province, Cape Peninsula, 16.10.1955, 6 ♂, (including type), 15 ♀ (B. P. Uvarov), British Museum (Natural History).

***Uvarovidium smiti* sp.n. (Pl. 18).**

Type ♂. South Africa, Swartberg Mts., between Oudtshoorn and Albert. British Museum (Natural History).

Body lustrous, though the surface is wrinkled. Antenna with fifteen segments. Fastigium of vertex narrow-triangular; vertex with longitudinal carinula. Frontal ridge above the base of antennae lamelliform, below with a deep sulcus and strong carinulae, which are slightly diverging downwards; below the ocellus the ridge is slightly constricted. Lateral lobe of pronotum higher than its length. Meso-, metanotum and abdomen without carinae. Prosternal tubercle low, pyramidal. Mesosternal lobe longer than its width. Lower carina of the hind femur not serrated. Last abdominal tergite not expanded. Supra-anal plate triangular, with a pair of lateral elongated sclerotizations. Subgenital plate short, subconical.

Phallic complex: zygoma and apodemes of cingulum thin and slender; rami with strong lateral sclerotizations and narrow moderately sclerotized posterior continuation which forms a sheath covering the apical valves of penis and functionally represents the aedeagus.

General colouration brown. Behind the eye there is a short yellowish stripe. Hind femur externally and above with indistinct dark brown transverse oblique fasciae, internally brownish. Hind tibia brownish-red. Sclerotization, on the supra-anal plate black.

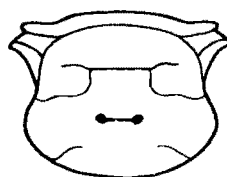
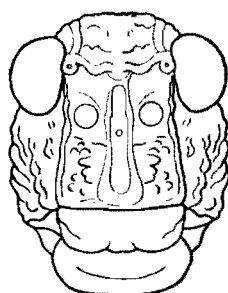
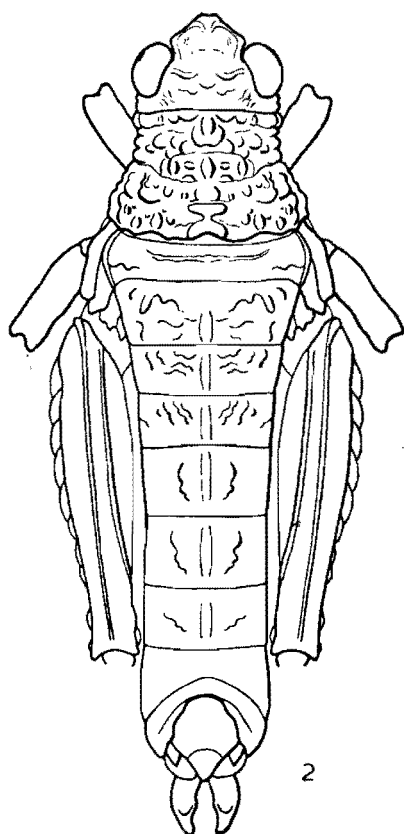
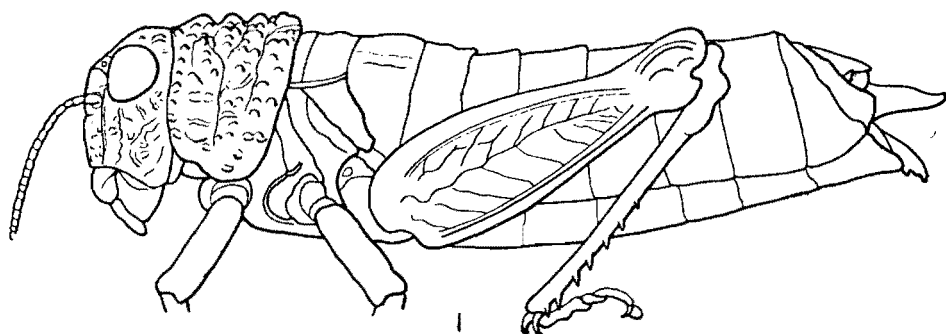
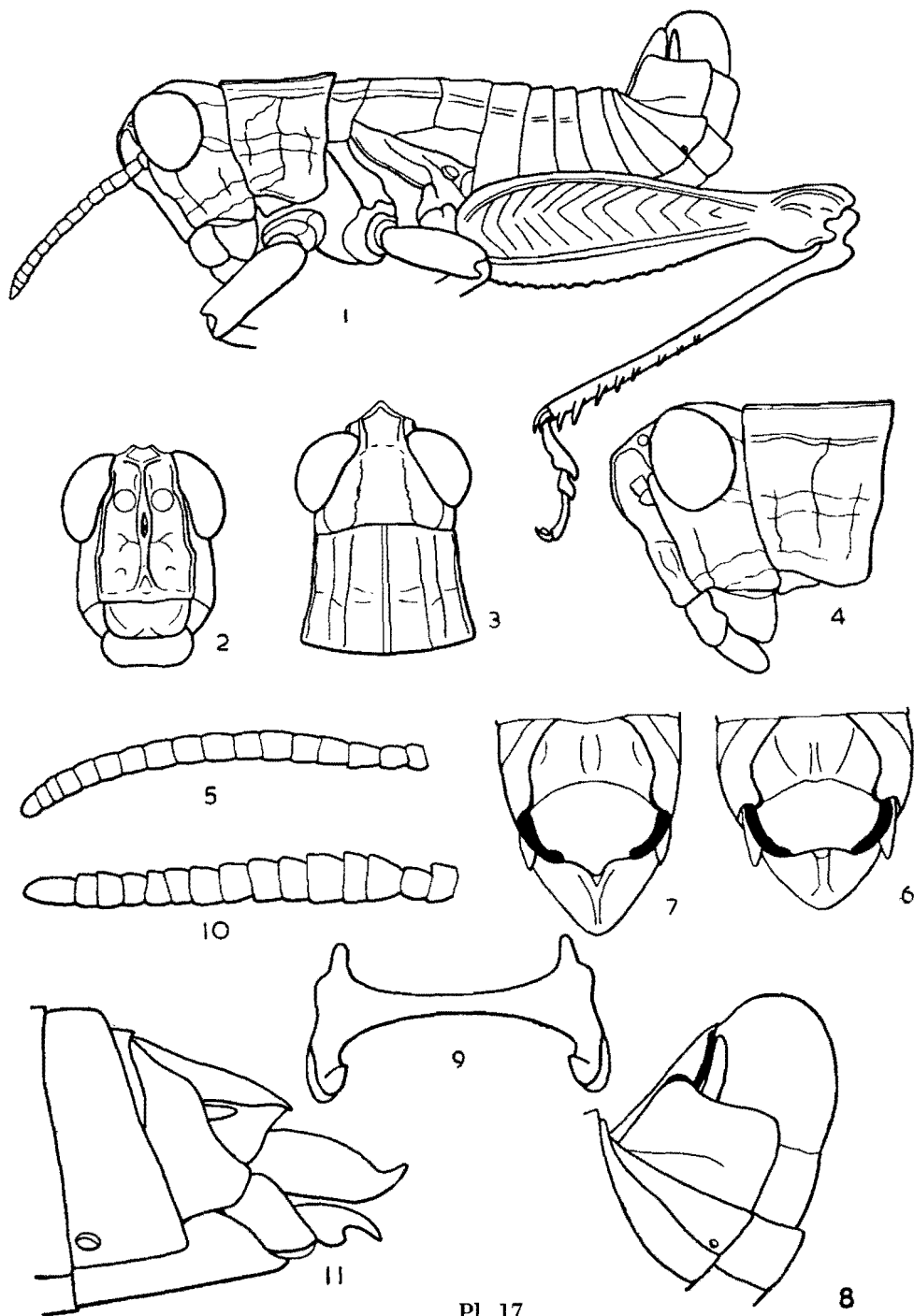


PLATE 16. *Eneremius namaquensis* sp. n. female, type. Fig. 1, whole insect, lateral view. 2, ditto, above. 3, face. 4, meso- and metasternum.



Pl. 17

♀ (Paratype). As the male, but larger. Valves of ovipositor comparatively curved.

Length of body ♂ 12.5—13.2, ♀ 17.2; pronotum ♂ 2.1—2.3, ♀ 3; hind femur ♂ 6.8—7, ♀ 8.3 mm.

South Africa: Cape Province, Swartberg Mts., between Oudtshoorn and Albert 18.10.1955, 3 ♂ (including type), 1 ♀, 9 nymphs (B. P. Uvarov). British Museum (Natural History). 7 Weeks Poort, 30.10.1941, 1 ♀ (G. van Son).

Named after Mr. C. J. B. Smit who has assisted Dr. Uvarov in collecting this and other new species.

The new species is superficially strikingly similar to *Uvarovidium peninsulare* but differs strongly by the shape of supra-anal and subgenital plates, shape of the last abdominal tergite, fastigium of vertex, sulcate frontal carina and other characters mentioned in the description. The structure of the phallic organ in the two species is so distinct that they might be regarded as belonging to unrelated genera. Their epiphalli, however, are rather similar.

Leatettix gen. n.

Body small, apterous. Antenna shorter than head and pronotum together, compressed laterally, in the male slightly, in the female strongly, widened in the basal half. Fastigium of vertex triangularly projecting in front of the eyes, with carinate margins, strongly concave in the middle. Frontal ridge above the ocellus strongly projecting forwards; above the base of antennae thin, lamelliform, below with a deep sulcus and strong, almost parallel, carinulae. Facial carina strong, irregularly curved.

Pronotum short, subcylindrical, with slightly excurved anterior and slightly incurved posterior margin. Median carina distinct, interrupted by three weak transverse sulci; lateral carina indistinct. Prosternal tubercle short and broad, with the apex and posterior surface rounded; anterior surface flat, vertical. Mesosternal interspace as long as broad. Mesosternal lobe small, as long as broad, regularly rounded. Metasternal interspace elongate, open. Elytra and wings completely absent. Tympanum absent. Hind femur moderately broad. External apical spine in the hind tibia present. Arolium large, longer than a claw. Male supra-anal plate much broader than long, with a triangular projection on the apex and rounded, upcurved lateral margins. Cercus short, conical. Subgenital plate short, subconical, in upper part compressed laterally. Female supra-anal plate simple, triangular; subgenital plate trilobate, the lobes triangular. Ovipositor valves short, weakly curved at the apices; the lower valve with a small rounded lateral projection.

Phallic complex: penis completely divided in basal and apical valves.

PLATE 17. *Uvarovidium peninsulare* gen. & sp. n. Figs. 1—9, male, type, 1, whole insect. 2, face. 3, head and pronotum, above. 4, ditto, lateral view. 5, male antenna. 6, end of abdomen, above (type). 7, ditto, extreme variation. 8, end of abdomen, lateral view. 9, epiphallus. Figs. 10, 11, female. 10, antenna. 11, end of abdomen.

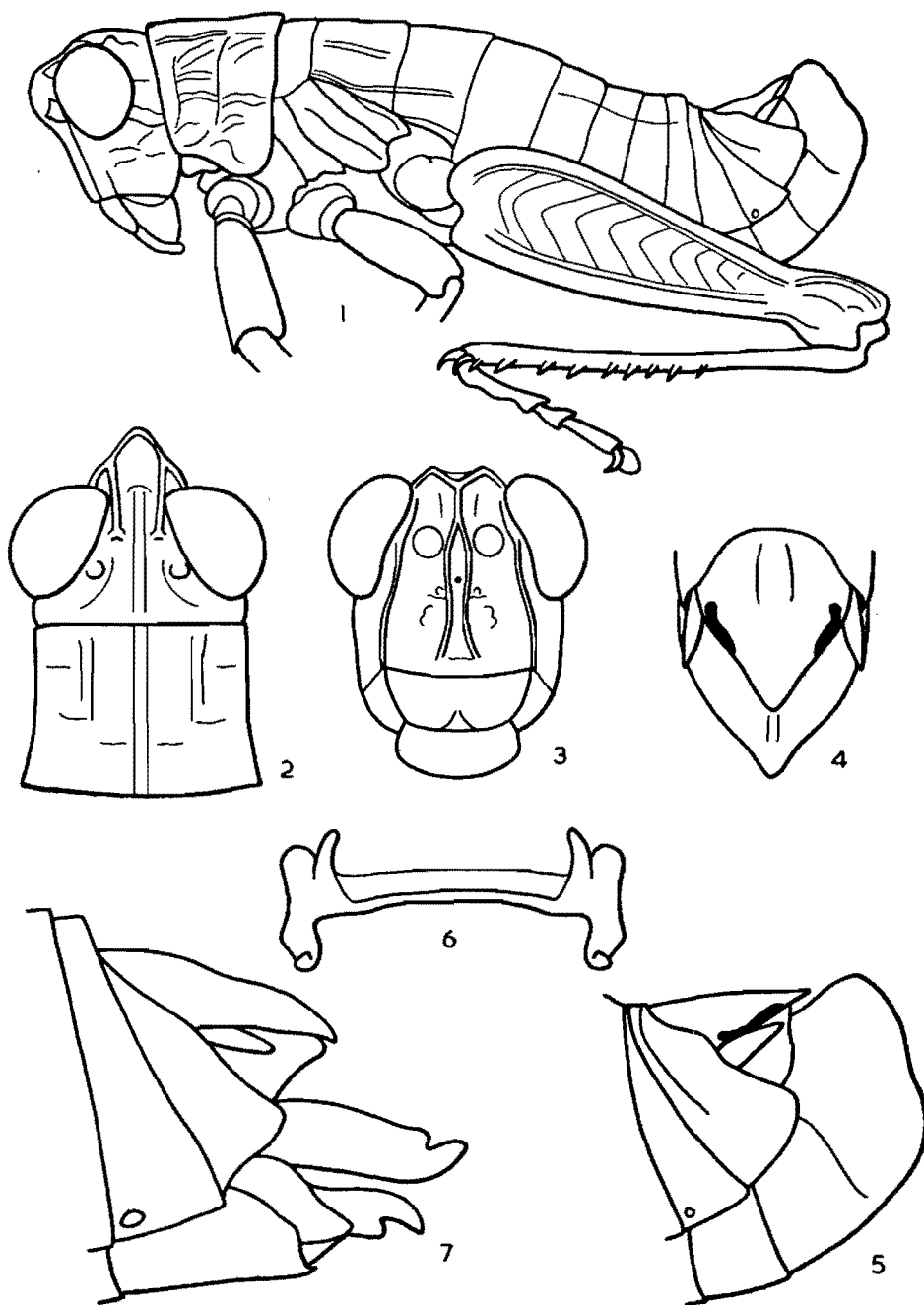


PLATE 18. *Uvarovidium smiti* sp. n. Figs. 1—6, male, type. 1, whole insect. 2, head and pronotum, above. 3, face. 4, end of abdomen, above. 5, ditto, lateral view. 6, epiphallus. 7, female, end of abdomen.

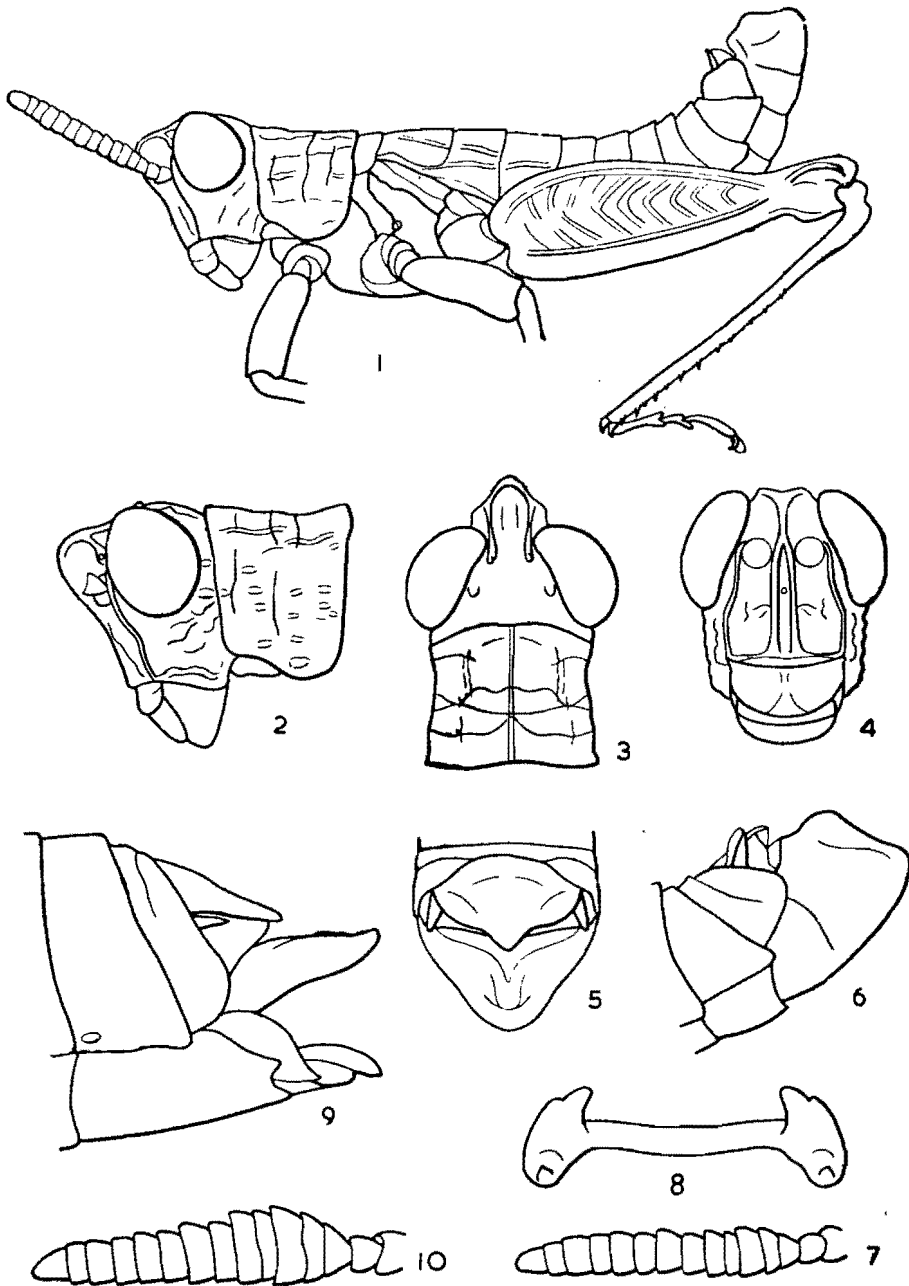


PLATE 19. *Leatettix laticornis* gen. & sp. n. Figs. 1—8, male, type, 1, whole insect. 2, head and pronotum, lateral view. 3, ditto, above. 4, face. 5, end of abdomen, above. 6, ditto, lateral view. 7, antenna. 8, epiphallus. Figs. 9, 10, female. 9, end of abdomen. 10, antenna.

Spermatophore sac small, located between the valves of penis. Ventral slit of the phallotreme long. Zygoma and apodemes of cingulum strong, rather robust; rami strongly sclerotized, short, are not forming a sheath. Epiphallus bridge-shaped, with large ancorae, hook-shaped lophi and moderately small lateral plates. Oval sclerites elongated.

Type-species: *Leatettix laticornis* sp.n.

The new genus is named after Mr. A. Lea, well known South African entomologist; it is near to *Uvarovidium* described above but they are easily separated, as follows:

<i>Leatettix</i>	<i>Uvarovidium</i>
Antenna very short, compressed and widened in the basal half.	Antenna longer, filiform.
Transverse sulci of pronotum weak, but interrupt the median carina.	Transverse sulci indistinct.
Male supra-anal plate wider than long, without sclerotizations.	Male subgenital plate longer than wide, with a pair of strong lateral sclerotizations.
Rami of cingulum not forming sheath of apical valves of penis.	Rami of cingulum forming sheath or sheath-like structure covering apical valves of penis.

The exact position of the genus and its relationship with the other genera could be decided only after studying the whole group, which is probably very rich, but remains largely unknown because collectors ignore such larvae-like insects.

***Leatettix laticornis* sp.n. (Pl. 19).**

Type ♂. South Africa: Cape Province, between Aberdeen and Somerset East. British Museum (Natural History).

Body rugulose. Antenna with fifteen segments. Fastigium of vertex narrow, with triangular apex and incurved lateral margins; there are two pairs of tubercles near the eyes. Hind femur moderately broad.

General colouration brown. Behind the eye there is a yellowish longitudinal stripe, which continues on the lateral lobe of pronotum, where it diffuses into indefinite dirty-yellowish spots. Hind femur externally with an indefinite dark brown pattern forming on the upper surface two weakly defined fasciae; internally the femur is dirty-ochraceous. Hind tibia greyish-brown.

♀ (Paratype). As the male, but larger. Antenna with seventeen segments. Apex of the fastigium of vertex more rounded. The stripe on the lateral lobe of pronotum more definite.

Length of body ♂ 10.8—11, ♀ 17.5—17.8; pronotum ♂ 2, ♀ 2.3; hind femur ♂ 5.6, ♀ 6.8 mm.

South Africa: Cape Province, between Aberdeen and Somerset East, 18.10.1955, 2 ♂ (including type), 3 ♀. Little Karroo, N. of George, 17.10.1955, 1 ♀ (B. P. Uvarov). British Museum (Natural History).